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U.S. MILITARY SALES TO IRAN

A STAFF REPORT

TO THE

SUBCOMMITTEE ON FOREIGN ASSISTANCE

OF THE

COMMITTEE ON FOREIGN RELATIONS
UNITED STATES SENATE

JULY 1976

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FOREWORD

On behalf of the Subcommittee on Foreign Assistance of the Senate Committee on Foreign Relations, I am pleased to publish this report on U.S. Military Sales to Iran. This is the first of a series of oversight activities in the foreign assistance area to be undertaken by the staff at the direction of the subcommittee.

The Iranian military sales program is the largest in the world in terms of dollar value and the number of Americans involved in implementing the program, both in Iran and the United States.

The size of the program, the strategic and political importance of Iran and the Persian Gulf area, and reported difficulties in program management and implementation are factors which led the Subcommittee to direct that this study be undertaken as its first oversight project.

The study's findings and conclusions indicate that there are serious problems with some of the programs which merit the immediate attention of the executive branch. I am concerned that, although the Department of Defense has taken initial corrective steps in the management aspects of the United States-Iran sales programs, neither the President nor the Secretary of State have recommended any basic policy changes. My overriding concern is that both the executive branch and the Congress have thus far ignored the substantial and far-reaching foreign policy implications which result from our deep involvement in sales, training and logistical supply programs with Iran. The decision to sell is in most instances followed by a long-term U.S. involvement in program implementation which affects the future foreign policy flexibility of the United States.

The study was written by Robert Mantel, a Staff Associate of the Committee on Foreign Relations, and Geoffrey Kemp, a consultant to the committee for this project. Prior to joining the professional staff of the committee, Mr. Mantel worked for seven years in the International Affairs Division of the White House Office of Management and Budget (OMB) on military assistance and sales programs. Mr. Kemp is an Associate Professor of International Politics at the Fletcher School of Law and Diplomacy. He served as a consultant in the Department of Defense, Office of International Security Affairs (OSD/ISA) during 1975.

The authors conducted extensive research in connection with this study, including numerous interviews in both the United States and Iran. They were in Iran between March 2–17, 1976. At the request of Senator Case, the authors were accompanied during a portion of their research in Iran by Mr. Stephen Bryen of the committee staff.

HUBERT H. HUMPHREY,
Chairman, Subcommittee on Foreign Assistance.

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TABLE OF CONTENTS

SUMMARY

		Page
I.	INTRODUCTION	
	A. Reason for Study	1
	B. Scope and Focus of the Study	2
II.	EVOLUTION OF U.S. MILITARY PROGRAMS IN IRAN	4
III.	THE DEMAND FOR ARMS	
	A. The Strategic Setting	7
IV.	IRAN'S MAJOR DEFENSE PROGRAMS	
	A. The Iranian Defense Budget	13
	B. Imperial Iranian Ground Forces	14
	C. Imperial Iranian Navy	19
	D. Imperial Iranian Air Force	25
V.	DEMOGRAPHIC AND SOCIO-ECONOMIC EFFECTS OF IRAN'S MILITARY PROGRAMS	
	A. U.S. Citizens in Iran	33
	B. Socio-Economic change	37
VI.	THE SUPPLY OF ARMS	
	A. The Arms Transfer Process (General)	38
	B. Roles of the Executive Branch Departments in Arms Transfers to Iran	41
VII.	CONCLUDING COMMENTS	
	A. U.S. Interests and Iranian Security Policy	49
	B. Policy Implications of U.S. Military Involvement in Iran	50
	C. The Executive Branch Decision-Making Process on Iran Arms Transfers	53
APPENDIX		
A.	High Level Visitors to Iran	55
B.	Security Assistance Dollar Value	58
C.	List of Contractors and Personnel	59

SUMMARY

Iran is the largest single purchaser of U.S. military equipment. Government-to-government military sales to Iran increased over sevenfold from $524 million in Fiscal Year (FY) 1972 to $3.91 billion in FY 1974, slackening off a little to $2.6 billion in FY 1975. The preliminary sales estimate for FY 1976 is $1.3 billion. Sales in the 1972–76 period totalled $10.4 billion. The number of official and private American citizens in Iran, a large percentage of whom are involved in military programs, has also increased from approximately 15,000–16,000 in 1972 to 24,000 in 1976; it could easily reach 50,000–60,000 or higher by 1980.

Iran is and will remain an extremely important country to the U.S. and its allies because of its geographical location and oil. Iran, on the other hand, places great importance on its relationship with the U.S., in large part because of the Iranian belief that the U.S. may come to Iran's defense if it is threatened. Iran has undertaken a major military expansion and modernization program in recent years to protect its interests from numerous perceived threats. Iranian officials also view the military buildup as the spearhead of a broader program to transform Iran into a modern economic as well as military power within twenty years.

U.S. officials share many of Iran's defense concerns, and U.S. and Iranian foreign policy interests coincide in most instances, with the notable exception of oil pricing. Thus, Iran wants to buy its most sophisticated arms and defense equipment from the U.S. for political as well as economic reasons; it prefers to contract through the Department of Defense on a government-to-government basis rather than deal directly with U.S. private companies. Arms sales are, therefore, an important component of U.S.-Iranian foreign relations.

Because the U.S. has a major interest in the military security of Iran, most Iranian arms requests have been favorably received.

In May, 1972, President Nixon and then National Security Advisor Kissinger, agreed for the first time to sell Iran virtually any conventional weapons it wanted and so instructed the bureaucracy in a memorandum in late July, 1972. In 1973, oil prices were quadrupled and from that time on Iranian purchases from the U.S. boomed. The direct participation of U.S. Government and industry in Iranian defense programs, which increased after this bonanza, has raised important procedural and policy questions about the magnitude and nature of the programs, the manner in which they have been implemented, and the implications they pose for the future.

In this study we focused our attention on the U.S. decision-making process, the U.S. involvement (managerial and operational) in implementing the arms sales programs to Iran, and on identifying and analyzing future policy and programmatic implications inherent in the U.S.-Iranian military relationship as it has emerged. Based upon

our research, extensive interviews with U.S. and Iranian officials and private citizens both in the U.S. and Iran, and a close examination of the current data on U.S. arms programs, the following findings emerge concerning U.S.-Iranian military relations and U.S. arms sales policy.

Findings

1. Iran has purchased large quantities of some of the most sophisticated equipment in the U.S. inventory including the F–14 Tom Cat Fighter and the DD993 modified Spruance Class destroyer. The F–14 system is so complicated that the United States Navy is having major difficulty keeping it operational; Iran's Spruance Class destroyer will be even more spohisticated than those being procured by the U.S. Navy. Iran is already the dominant military power in the Persian Gulf area. Upon delivery between now and 1981 of equipment ordered to date, Iran, on paper, can be regarded as a regional superpower. Although future purchases of new U.S. equipment and related services are likely to decline in absolute terms from the fiscal year 1974 and 1975 levels, any additional sales will add to an already sizeable inventory.

—Iran is considering the purchase of additional sophisticated equipment such as the F–16 or F–18, and AWACS aircraft;

—To pay for new systems and complete its planned purchases of such systems as the Spruance Class destroyer, Iran has proposed barter arrangements (weapons for oil) to compensate for a reduction in normal oil revenues;

2. The Government of Iran is attempting to create an extremely modern military establishment in a country that lacks the technical, educational and industrial base to provide the necessary trained personnel and management capabilities to operate such an establishment effectively. Iran also lacks experience in logistics and support operations and does not have the maintenance capabilities, the infrastructure (port facilities, roads, rail nets, etc.), and the construction capacity to implement its new programs independent of outside support.

—Most informed observers feel that Iran will not be able to absorb and operate within the next five to ten years a large proportion of the sophisticated military systems purchased from the U.S. unless increasing numbers of American personnel go to Iran in a support capacity. This support, alone, may not be sufficient to guarantee success for the Iranian program;

—The schedule for virtually every major program except equipment deliveries to the point of entry into Iran has slipped considerably due to the limitations noted above;

—In the face of immense obstacles, our investigation indicated that the Iranian Armed Forces are making a maximum effort to ensure the success of the modernization program; their efforts, however, are hampered because of rapid expansion in the civilian sector as well. The military, for example, has difficulty in matching civilian salary offers to the growing, but still insufficient numbers of trained personnel.

3. The 1972 decision by President Nixon to sell Iran the F–14 and/or the F–15 aircraft and, in general, to let Iran buy anything it wanted, effectively exempted Iran from arms sales review processes in the State

and Defense Departments. This lack of policy review on individual sales requests inhibited any inclinations in the Embassy, the U.S. military mission in Iran (ARMISH–MAAG), or desk officers in State and DOD to assert control over day-to-day events; it created a bonanza for U.S. weapons manufacturers, the procurement branches of the three U.S. services and the Defense Security Assistance Agency.

—Between 1973–75, the activities of U.S. arms salesmen, official and private, were not closely supervised by Executive Branch officials charged with doing so, or by the Congress;

—Each of the U.S. services, particularly the Air Force and Navy, was trying to sell equipment for its own reasons, usually to lower per-unit costs of its own procurements or to recoup part of its prior research and development investment. On occasion, the services fiercely competed with each other for sales to Iran, e.g. the Air Force and Navy to sell the F–15 and F–14 respectively;

—The services often did not inform the Iranians of the full extent of the training, logistics, and maintenance implications of the systems they were trying to sell. Thus, Iran may have been unaware of the complexities involved in translating its purchases into an effective fighting force. Problems in all of these areas are very serious:

—Discussions both in Washington and Iran have confirmed that until recently U.S. appreciation of the management problems of the arms programs in Iran was extremely limited;

—Secretary Schlesinger's decision to appoint a senior civilian Defense Representative in Iran in September, 1975, to oversee and coordinate U.S. military programs in Iran is considered by virtually everyone to be a positive and necessary development, given the chaos and problems that had emerged in program management and implementation. Nevertheless, until there is clear policy direction and effective program management in Washington, the problems in the field (Iran) will continue. Deputy Secretary Ellsworth issued a directive in February, 1976, that he hopes will ensure coordination and policy direction within the DOD;

—Evidence gathered indicates that the Iranian arms sales program is not yet fully under control. Only with more effective control from Washington can the inherent propensity of civilian contractors and U.S. armed services to sell in an unrestrained manner be curbed.

4. The presence of large and growing numbers of Americans in Iran has already given rise to socio-economic problems. Although many of these have proven to be manageable, they could become worse should there be a major change in U.S.-Iranian relations.

—On the whole, U.S.-Iranian personal relationships are excellent, if somewhat formal;

—We were told that some of the early problems were due to the presence of large numbers of young, single American male civilians without adequate recreational outlets. Decisions by some of the private companies to limit the number of unattached male employees have improved social relations, especially in more traditional cities such as Isfahan;

—There are many other foreigners in Iran as well as Americans, including British, German, South Korean, French, Filipino, Indian and Pakistani;

76-929 O - 76 - 2

—Anti-Americanism could become a serious problem in Iran, as it has elsewhere, if there were to be a change in government in Iran. The possibility of a future crisis situation cannot be totally ignored and for this reason contingency plans to deal with such an emergency are necessary.

5. The U.S., having sold sophisticated arms in large quantities to Iran, has assumed a growing and significant "commitment" in terms of supporting that equipment—an unstated but nevertheless real obligation to train Iranians and to provide logistical support for the lifetime of the equipment. To the extent that the decisions to sell the arms were politically motivated, a failure to provide follow-on support to the satisfaction of Iran would vitiate the political benefits of having made the sales. The deep involvement of U.S. personnel assisting Iran in program implementation has significant foreign policy implications for the United States in the Persian Gulf.

—The U.S. cannot abandon, substantially diminish, or even redirect its arms programs without precipitating a major crisis in U.S.-Iranian relations;

—If Iran is not able effectively to use the equipment it has purchased, it may blame the U.S. for the failures;

—There is general agreement among U.S. personnel involved with the Iranian programs that it is unlikely that Iran could go to war in the next five to ten years with its current and prospective inventory, i.e., purchases to date, of sophisticated weapons (as distinct from some of the less sophisticated ground equipment) without U.S. support on a day-to-day basis.

6. The symbiotic relationship, and Iranian dependence on the U.S., has political advantages and disadvantages for both countries. In theory, the U.S. has the capability to immobilize major components of the Iranian armed forces, especially the Air Force, by cutting off spares, munitions and maintenance support should Iran try to use U.S. equipment for purposes contrary to important U.S. interests. Iran knows this could happen and is therefore unlikely to precipitate a showdown, e.g. by aiding the Arabs against Israel. However, if, *in extremis*, there were a crisis, the United States personnel in Iran could become, in a sense, hostages. The most difficult potential problems are likely to arise in those hypothetical "gray areas" when it is not self-evident that Iran's use of U.S. equipment is contrary to U.S. interests but when its use may embroil U.S. personnel in an on-going conflict situation, e.g. a new war between India and Pakistan in which the Iranians might participate with U.S. equipment. In this type of situation:

—Any attempt to limit the end-use of U.S. equipment could result in a sharp deterioration in U.S.-Iranian relations;

—Failure to limit the Iranians given our capabilities would amount to implicit endorsement of their action and tacit approval of the use of U.S. equipment which, in turn, would almost certainly mean the use of U.S. personnel in a support capacity. Whether this would mean *front-line*, i.e. base level, participation by uniformed U.S. personnel or *rear-line* involvement by U.S. official or contractor personnel would depend upon the actual weapons used and the duration and intensity of the conflict. Clearly the most serious case would be the former;

—Since Iran has memories of the abrupt cut-off of U.S. arms to Pakistan in 1965, and to Turkey in 1974, and because of the political symbolism that stems from a close supplier-client arms relationship, it is not clear who really has influence over whom in time of an ambiguous crisis situation. Senior U.S. officials have expressed concern about the U.S. being labeled as an unreliable supplier; this concern undoubtedly inhibits the U.S. will to exercise its capability to terminate support;

—Thus far the U.S. has not had to face any serious problems concerning the use of U.S. arms by Iran. Iran's participation in counterinsurgency operations in Oman has not involved any U.S. personnel and the U.S. has not opposed the use of U.S. equipment in that conflict.

7. Iranian officials see actual or potential military threats from all directions; they are particularly concerned about protecting Iran's oil "lifeline," the source of virtually all of the country's wealth and revenue. Iran views the Soviet Union as the major threat at the present time, having resolved its immediate differences with Iraq over the Kurds and the Shatt-al-Arab waterway. Iranian officials expressed concern about indirect, as well as direct, Soviet threats in the future through the latter's ties with neighboring India, Afghanistan, and Iraq. These officials are also worried about Soviet support for radical groups on the Arab side of the Gulf and Soviet encouragement of separatist tendencies among certain tribes in Iran. U.S. officials are also concerned about many of these threats to Iran; in particular, U.S. officials stress the importance of stability in the region and the uninterrupted flow of oil. The U.S., however, has officially neither endorsed nor rejected the Iranian perception of the threat.

8. Iranian and U.S. officials do not feel that U.S. sales to Iran promote similar requests from Saudi Arabia.

—Both states have substantially increased their defense expenditures, but not in an obviously competitive fashion;

—The Saudi Arabian military buildup, a large percentage of which is devoted to basic infrastructure such as roads, ports and housing, is not primarily driven by the Iranian buildup;

—There is little resemblance between the two programs. The most sophisticated weapons purchased by the Saudis are the F–5E fighter aircraft with Maverick and Sidewinder missiles and the Improved Hawk air defense system, whereas Iran has purchased the F–4D, F–4E, and F–14 aircraft, DD993 Spruance class destroyers, and Chieftain and M–60A1 tanks in addition to the F–5E and Improved Hawk;

—Procurement decisions by both countries over the last decade indicate that neither has regarded the other as a primary threat. It is possible, but not likely, that as these countries expand their forces, they will come to regard each other as potential adversaries.

9. There is evidence of incipient military competition between Iran/Pakistan, on the one hand, and India on the other. The Shah has stated that he would not tolerate any further dismemberment of Pakistan and has developed close military ties with Pakistan. That the Iranians are constructing new bases and facilities in the southeastern part of the country, in particular the huge tri-service (army, navy, air force) complex at Chah Bahar, is evidence of its concern over potential

threats from the region. Indian officials, on the other hand, have expressed concern over growing maritime threats in the Indian Ocean and are seeking higher naval appropriations.

10. Although Iran is arming against a number of potential threats ranging from the Soviet Union to blockage of the mouth of the Gulf (the Straits of Hormuz) and external support for separatism in Baluchestan, it is clear from our discussions that factors other than operational effectiveness, such as deterrence and prestige, seem to motivate Iran's hardware purchases.

—Iran apparently believes that possession of the most advanced systems may serve as a deterrent;

—Many U.S. military personnel believe that weapons such as the F–14 aircraft and the DD993 Spruance class destroyers are not very useful to Iran in the probable contingencies that it might face in the next ten years;

—We were told that because of the priority given to "prestige" systems such as the F–14, already trained personnel assigned to other systems that are more relevant to near-term threats (F–5E and F–4), have been transferred to the newer systems with a resultant unmeasurable degradation in overall force effectiveness;

—Iran's military programs are having a profound effect upon the socio-economic development of the country. Thousands of young Iranians are learning skills that have application to the economy as a whole. The creation of new bases, e.g. Chah Bahar, and the expansion of existing ones, e.g. Bandar Abbas, are resulting in the development of basic infrastructure and the creation of new communities in sparsely populated regions of the country. Thus the bases may be a catalyst for population redistribution and industrial growth.

11. The recent history of U.S. arms sales to Iran highlights some of the inherent strengths and weaknesses of the Executive Branch in coordinating arms transfer policy and reconciling short with mid-to-long-term foreign policy interests.

—The State Department and the Embassy in Tehran have tended to take a strong, united position on the Iran issue. Senior State Department officials appear not to have been prepared to tolerate open debate on possible adverse implications of unrestricted arms sales to Iran;

—Within the Department of Defense, on the other hand, there were more diverse opinions due in part to the different missions, interests and power bases of its numerous components. The sales and procurement representatives of the Defense Security Assistance Agency (DSAA) and the military services tended to support high levels of sales to Iran; those responsible for policy formulation, training, and logistics and supply tended to be more critical;

—There have been no interagency studies in recent years dealing with arms sales to Iran or the Persian Gulf. A portion of a study of U.S. policy on arms transfers, pursuant to a directive issued in May, 1975, deals with this subject. As of June, 1976, this study had still not been completed, reflecting both the complexity of the subject and the considerable disagreement within the Executive Branch;

—A current study of U.S. policy toward the Persian Gulf, begun in April, 1976, is not yet completed.

12. Irrespective of the benefits and costs of U.S. sales programs to Iran, its history provides valuable insights concerning (1) the policy-making process which determined the nature and level of our current and future involvement; and (2) the policy and programmatic implications of a deep U.S. military involvement with a major arms recipient.

—The Iran case demonstrates that there needs to be more explicit recognition that when the United States sells major weapons in large numbers to a non-industrial state, it is, in effect, entering into a long-term commitment to provide support to those weapons. This life cycle support has military, political, economic and sociological implications which are not easy to anticipate and may eventually create new problems for the U.S.;

—Although the nature of U.S.-recipient relationships will vary depending upon circumstances, there is no such thing as a "non-binding" arms sales agreement. Even if the U.S. Government were to play *no* administrative role in foreign military sales, i.e. rely on the private sector for implementing arms sales, U.S. personnel and inevitably the U.S. Government, would still be involved.

General Conclusions

Our first general conclusion is that for at least three years U.S. arms sales to Iran were out of control and the programs were poorly managed. Badly managed arms sales programs are not in U.S. interests. We, therefore, believe that the Iran program demonstrates the importance of and need for effective Congressional oversight to focus attention on these issues and thereby ensure that the Executive Branch takes further action immediately to correct the management deficiencies in Iranian arms sales programs.

Our second general conclusion is that, over time, the so-called "back-end" implementation aspects of arms sales can have a strong influence upon the flexibility of political leaders to change or modify their "front-end" choices. Events leading up to a sale itself, the so-called "front-end" issues, attract attention because they often deal explicitly with grand strategies and require high level policy decisions. The "back-end" process, i.e., what happens after a sales contract has been signed, involves the entire spectrum of military operations—procurement, finance, logistics, maintenance, and training—and may continue for ten or more years after the sale itself. The participation of large numbers of uniformed and civilian Americans, both in the recipient country and in the United States, may be necessary. This creates mutual commitments: the U.S. assumes the obligation of long-term support for the equipment it has sold; the purchaser becomes dependent on the U.S. in much the same manner as a local automobile dealer is dependent on Detroit.

The long-run policy implications of these commitments or obligations are important. On the one hand the United States has considerable leverage over the recipient, who could not sever its military ties with the U.S. without a devastating effect upon its military capabilities for years to come. On the other hand, the United States reputation as a dependable supplier is at stake and it may be reluctant to use the leverage it has.

This mutual and entangling relationship is not unique to the United States and its arms recipients. There is good evidence that the Soviet-Egyptian arms relationship has many of these same features. Therefore, a general lesson to be learned from the Iranian experience and applied to other major sales recipients is the need for both the Executive and Legislative branches to become better informed about these "back-end" aspects of military sales programs.

I. INTRODUCTION

(A) Reasons for the Study

Iran will remain an extremely important country to the United States and its Western allies for many years to come irrespective of its leadership or political ideology. A strong, *pro-Western* Iran provides security for critical oil supplies from Persian Gulf oil producing countries. No competitive alternatives to these oil supplies are in sight for at least the next decade. A strong, *anti-Western* Iran could eventually threaten the oil infrastructure of the Gulf area, with potentially catastrophic consequences for the West. A weak Iran, whether pro or anti-Western, could act as a catalyst for instability and conflict in the Gulf region. Any major conflict in the region would pose a threat to the oil supplies.

U.S. officials, therefore, believe that it is in the overall policy interests of the United States to support a strong, pro-Western Iran. The sale of military equipment and the provision of defense services such as training and support are regarded as important instruments of this policy. What is more controversial and more open to criticism, review and reassessment is the magnitude and nature of U.S. military programs, the manner in which they have been implemented, and the implications they pose for the future. The purpose of this study, therefore, is to examine in general terms the important factors influencing the supply and demand for American defense articles and services, and to discuss in more precise terms their potential effect upon U.S.-Iranian relations.

There are at least seven specific but interrelated reasons for examining the current status of U.S. military programs in Iran.

First, Iran is currently the largest purchaser of U.S. military equipment and services. The value of the U.S. military sales to Iran over the past four years (FY 72–FY 76) amounts to $10.4 billion. There is every reason to expect requests for further major purchases from the United States over the coming years.

Second, because of Iran's relatively underdeveloped infrastructure and paucity of skilled personnel, the United States is assisting the Iranian Government with the implementation of most of the U.S. military programs and many civilian projects which are scheduled to peak over the next five years. Thus, increasing numbers of American personnel and their dependents are going to Iran for periods ranging from a few months to several years. At the beginning of 1976, the estimated numbers were 24,000. Most informed observers believe these numbers will increase to 50,000–60,000 or higher by the end of the decade. Although the presence of large numbers of Americans in Iran should not necessarily be a source for concern, socio-political problems have already been encountered and can be anticipated in the future. *In extremis*, we cannot be insensitive to the fact that a major change in the political climate of U.S.-Iranian relations or increased internal

or external conflict within Iran or between Iran and its neighbors might pose security difficulties for the American residents.

Third, Iran's ability to buy more U.S. arms and to finance the implementation of existing programs is sensitive to oil revenues and the rising price of U.S. defense articles and services. A decline in Iran's oil revenues and continued price inflation in the costs of U.S. weapons has already led to the deferment of some orders for U.S. weapons and there have been tentative proposals for barter agreements exchanging oil for defense equipment. Thus, there is a direct relationship between Iranian oil revenues and level of arms purchases from the U.S.

Fourth, the magnitude and nature of the Iranian military buildup has prompted speculation about a Persian Gulf arms race, which, in turn, could increase the prospects for armed conflict among the local states and lead to a possible disruption of oil supplies. For this reason among others, there has been increasing criticism of U.S. arms sales policy, including proposals to embargo U.S. arms sales to the Gulf countries. It is worth examining the credibility of the "arms-race" argument.

Fifth, there has been growing concern within the U.S. Executive Branch, especially in the Department of Defense, over the management of U.S. military programs. It was for this reason that Defense Secretary Schlesinger appointed in 1975 a senior civilian Defense Department representative to go to Iran and take charge of all DOD programs; this representative outranks the Chief of ARMISH–MAAG, a two-star general. These serious managerial problems have not been fully appreciated by the U.S. Congress. Since Congress has ultimate authority over U.S. military programs in Iran, it should be fully conversant with the facts and problems of our involvement.

Sixth, the United States is not the only industrial country selling arms to Iran. Britain and France and to a lesser extent the Soviet Union, Italy and West Germany have sold military items and are capable of and anxious to obtain further orders. Thus we are, to some extent, competing for arms sales and many non-military items Iran wants to buy. This competitive market situation raises questions about worldwide U.S. arms sales policy, especially *vis-a-vis* the European allies, for there may be linkages between Gulf arms sales and the desire for more cooperation with NATO Europe over joint procurement and standardization programs.

Seventh, irrespective of the benefits and costs of U.S. sales program to Iran, its history provides valuable insights concerning the policy-making processes which determined the nature of our current involvement. By understanding these processes, we can better understand future foreign policy issues that may emerge either in the context of our Persian Gulf policy or in other geographic areas where major U.S. military sales may be contemplated in the future.

(B) Scope and Focus of the Study

The scope and focus of this study will be limited to an analysis of the political, military, and economic factors influencing the supply and demand for U.S. defense articles and services, the scope and nature of U.S. military programs in Iran, and the foreign policy implications of the U.S.-Iranian defense relationship.*

*This study does not include an analysis of the military effectiveness of Iran's military procurements. This issue, although very important to overall U.S. interests, was considered to be beyond the scope of this particular review.

In assessing supply and demand factors it can be said that Iran's requests for U.S. arms are a function of the Shah's perception of Iran's strategic requirements and the amount of revenue Iran has available to purchase weapons in the United States. Since the defense decision-making process in Iran is very straightforward, an analysis of the demand for particular defense programs requires three basic inputs: an understanding of the Shah, an understanding of the regional security environment which helps to condition his thinking, and an understanding of Iran's financial assets.

The factors influencing the supply of U.S. arms are more complex and therefore subject to more varied interpretation. The precise reasons why the U.S. Government sold Iran F–14's and DD993's rather than other aircraft or smaller naval vessels, stemmed from decisions based upon the visit of President Nixon and Dr. Kissinger to Iran in May 1972, the quadrupling of oil prices in 1973, the activities of the U.S. armed services, U.S. defense contractors, the U.S. Embassy in Tehran, the State Department and the Department of Defense. While it is not intended to present detailed case studies of each major U.S. sale, the procedures and practices that lead up to a sale, so-called "front-end" operations, will be considered as will the activities that occur after a contract for defense articles or services has been signed, the so-called "back-end" operations.

76-929 O - 76 - 3

II. EVOLUTION OF U.S. MILITARY PROGRAMS IN IRAN

The U.S. military relationship with Iran after World War II was limited to a relatively small grant military assistance program, continuation of the U.S. Military Mission to the Imperial Iranian Gendarmarie (GENMISH) established in 1943, and the establishment in 1947 of the U.S. Army Mission Headquarters (ARMISH), a mission to the Ministry of War and the Iranian Army to enhance the efficiency of the army. Under the Mutual Defense Assistance Agreement of 1950, the U.S. agreed to provide technical personnel to discharge the U.S. government's responsibilities under the agreement. The U.S. provided $687 million in grant aid between 1950 and 1965, an average of $45 million per year and an additional $149 million between 1965 and 1972. The U.S. recognized the strategic importance of Iran but it did not seek a dominant military role during the 50's and early 60's, in effect deferring to the British economic and military presence in the region.

The creation in 1955 of the Baghdad Pact (Iraq, Turkey, U.K., Pakistan and Iran), with a permanent political, military and economic organization, formalized the existing bilateral defense relationships that had developed since the war. In 1956, the U.S. became a member of the Economic Committee of the Pact and set up a military liaison office. In 1958, Secretary of State Dulles told the Baghdad Pact countries that the Eisenhower Doctrine—a statement enunciated in March 1957 that the U.S. would take action to counter Communist subversion in the Middle East—commits the U.S. to their defense as effectively as would membership in the Pact. Iraq withdrew from the Pact in 1959, and the remaining members renamed it the Central Treaty Organization (CENTO). The U.S. and Iran concluded a bilateral pact in March 1959 for cooperation in promoting the security and defense of CENTO imembers. Identical agreements were signed with Turkey and Pakistan.

During the Kennedy Administration, the Shah became concerned with the reluctance of the U.S. to underwrite the cost of upgrading Iranian forces to a level that he felt necessary to match those of his now hostile neighbor, Iraq. President Kennedy informed the Shah during the latter's visit to the U.S. in March 1962, that future U.S. aid would emphasize long-term economic development rather than military strength. Presidential Counsel Theodore Sorensen commented on the Administration's view of Iran at the time:

> In Iran the Shah insisted on our supporting an expensive army too large for border incidents and internal security and of no use in an all-out war. His army . . . resembled the proverbial man who was too heavy to do any light work and too light to do any heavy work.*

*Sorensen : *Kennedy*, N.Y., Harper & Row, 1965, p. 628.

However, President Kennedy reaffirmed the U.S. commitment to Iran's independence. The Shah accepted a cutback in military aid but determined to set upon a more independent course in foreign affairs.

The Shah launched his "White Revolution" of economic and social reform in January 1963. Considerable opposition from religious leaders and landlords threatened by the reforms led to rioting in Tehran in June 1963. The Shah used these events to neutralize overt opposition, and he emerged with considerable strength internally that gave him more confidence in pursuing an independent foreign policy.

President Johnson changed U.S. policy toward Iran in 1964 by agreeing during the Shah's visit in June to provide Iran with foreign military sales credits. Between 1964–1969, Iran's economy continued to grow and the grant materiel, military assistance program was terminated in 1969 because Iran was now able to finance procurement of its defense needs. The U.S. concern and emphasis on promoting economic development in Iran persisted however, as U.S. agencies debated whether Iran could "afford" moderate levels of credit without excessive diversion from development needs. Credits actually provided for military purchases were as follows:

[In millions of dollars]

	Fiscal years									
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
FMS Credits	48	90	161	100	104					
Ex-Im Bank Credits							120	200	300	200

The qualitative and quantitative jump in the intensity of the U.S.-Iranian military relationship in the 1970's stems from the British decision in 1968 to terminate its military role "east of Suez" by 1971. Iran and certain Arab states, most notably Saudi Arabia, decided to increase their military forces to deter outside intervention and prevent "radical" forces from taking advantage of the resulting vacuum.

The U.S. conducted a major review of its Persian Gulf policy at this time and decided that, despite its strong interest in the "stability" and independence of the region, it would not try to replace the British with a U.S. military presence. The Nixon Administration decided to rely on local powers to preserve stability in the Gulf area and, accordingly, adopted the "twin-pillar" policy that presumed cooperation between Iran and Saudi Arabia and a coincidence of their interests with those of the U.S.

Data on U.S. arms sales to Iran since 1950 are contained in Annex A.

The most significant arms transfer decision occurred during the May 1972 visit to Tehran of President Nixon and Assistant to the President Henry Kissinger. The President informed the Shah (1) that the U.S. would sell Iran the F–14 or F–15 aircraft; and (2) that in the future, the U.S. would, in general, sell Iran any conventional weapons systems that it wanted. The decisions were confirmed in instructions to the bureaucracy.

Although these decisions are consistent with the "twin pillar" policy, they marked the beginning of the arms sales boom to Iran. The bureaucracy ceased its careful scrutiny of requests by Iran except for the most sophisticated systems involving release of state-of-the-art and highly classified technology. The dramatic increase in oil prices in 1973 provided Iran with the means to buy what it wanted. To the best of our knowledge, there was no formal review of the 1972 decisions in light of the oil bonanza. The decisions are operative today, although an interagency study of U.S. arms-transfer policies to Iran and other countries in the area is currently underway.

III. THE DEMAND FOR ARMS

A. The Strategic Setting

The high levels of Iran's demand for U.S. defense articles and services involve three basic factors. First, the decision-making process in Iran which leads to requests for U.S. and other foreign military equipment. Second, the strategic setting which influences threat perceptions and, therefore, in theory, the choice of weapons systems and force structures. Third, other factors, such as prestige and domestic political considerations, that influence procurement decisions.

1. DEFENSE DECISION-MAKING

The defense decision-making process in Iran is relatively simple. The Shah decides on all major purchases; his Vice Minister of War, Air Force General Hassan Toufanian, implements these decisions. The Shah is very knowledgeable about modern weapons technology; it has been said that he reads "Aviation Week" before he reads the Iranian press. He possesses enough expertise which, if combined with his power as supreme ruler of Iran, is sufficient to dampen even the most professional opposition to his procurement plans. In other words, once the Shah has decided that a particular system is required by the Iranian forces, it is unlikely that the Iranian defense establishment will challenge it and present serious alternatives. There is virtually no input into defense decisions by the civilian sector of the Iranian Government.

As a consequence there has been little overall coordination of the total Iranian defense procurement plan. There is presently no equivalent within the Iranian defense structure to the Program, Planning and Budgeting System (PPBS), which contributes to, but does not always determine the formulation of U.S. defense procurement decisions. Our research indicates that many of the long-term implications of Iranian weapons systems procurement, especially those to do with manpower and logistics support, were not examined in any detail prior to the procurement decisions.

One result is that the major problems facing Iran have to do with the *implementation* or "back-end" of weapons programs. This is in contrast with the United States and most NATO countries where often the most urgent defense problems relate to the "front end" decisions (what to buy and at what cost). Once a system has been ordered by U.S. or NATO/Europe forces, implementation is facilitated by the pool of trained manpower available and the legacy of experience.*

In the past the U.S. Military Mission in Iran (ARMISH-MAAG) played an important role in influencing decisions on procurement but once Iran was able to buy its weapons rather than rely on the U.S.

*However, it should be remembered that even West Germany had problems implementing the F–104 program because at that time (the early 1960's) the West German air force was not experienced in handling advanced equipment.

grant MAP, the degree of U.S. influence declined, especially during the critical period 1972–75 when many of the decisions on the large programs were reached. Furthermore, during this period vociferous and often conflicting advice was being freely offered to the Iranian military establishment and the Shah by a host of U.S. actors, including the U.S. Navy, the U.S. Air Force, and U.S. weapons manufacturers, each of whom had vested interests in selling Iran different weapons systems.

2. THREAT PERCEPTIONS AND DEFENSE PLANNING

Decisions about weapons procurement are closely held, rarely, if ever, subject to open debate, but frequently criticized by some Americans and privately by some Iranians; in contrast, however, there is more openness with regard to threat analysis. One reason for this is because there appears to be a greater consensus in Iran on the threats to Iran's security than on the desirability of buying specific weapons systems such as the F–14 aircraft.

Iran's geography and oil give it strategic importance.

During World War II Britain and the Soviet Union invaded and partitioned Iran primarily to secure oil supplies and a logistics route from the Persian Gulf into the Soviet Union.

The Shah, whose father, Reza Shah, abdicated after the invasion, has not forgotten this experience, which, coupled with the Soviet reluctance to evacuate Azerbaijan after the war, have made him and most Iranians extremely sensitive to the Soviet threat.

Three factors need to be weighed when analyzing the threats to Iran's security: geography, the military capabilities of adversaries or potential adversaries, and the time frame. In terms of geography it can be argued that Iran faces threats or potential threats from all directions and therefore it requires a "from all directions" defense policy. However, the military capabilities of Iran's possible adversaries vary, ranging from the "high intensity" threats posed by the Soviet Union and other well-armed countries to "low intensity" threats posed by poorly-armed or weak adversaries such as internal terrorists or the insurgents in Oman. If the time factor is taken into account the threat potential of more distant countries, such as India, must be considered. These three variables are summarized in the following table:

Threats to Iran

	"High Intensity" Threats	"Low Intensity" Threats
Present	USSR Iraq	Oman Separatism Terrorism
Future	USSR Iraq India	Arab Gulf Separatism Terrorism

a. Threats to the Oil:

Perhaps the most tangible threat to Iran concerns the vulnerability of her oil economy. If the flow of Iranian oil to the Western world were significantly reduced owing to military conflict, or the threat of

military conflict, the political and economic impact would be grave. Hence it is not surprising that considerable thought and a great deal of money has been devoted to ensuring the security of oil supplies.

Iran's oil is vulnerable to different threats at different points in the oil-flow cycle: the oil fields, the collecting system, the local terminal facilities and the oil sea lanes along which the super tankers tranship the oil to Europe, Asia, North America and Israel.

The most important oil fields are located in the foothills of the Zagros Mountains in the Southwest of the country at the head of the Persian Gulf. Although these fields are fairly close to the Iraqi border, they do not present as easy or as vulnerable a target as the major Saudi oil fields or other targets in the oil cycle. Sabotage and air strikes could threaten the oil wells and the oil field pumps, but it would be difficult for Iraq or any other adversary to occupy these fields without mounting a major offensive.

A more serious threat to the oil cycle concerns the vulnerability of the collecting system (pipelines and pumps) and local terminal facilities which Iran has developed to bring the oil from the fields and the terminals and to refine and/or tranship it. Major refineries are located at Abadan on the Shatt-al-Arab waterway adjacent to Iraq, at Kerman Shah, a little over 100 miles from the Iraqi border, and at Tehran. The first two refineries are especially vulnerable to air attacks and the Abadan refinery is within artillery range of Iraq.

The major storage and loading facilities for Iranian crude oil destined for export are located on Kharg Island near the major naval base at Bushehr. Kharg Island will remain an important strategic target so long as Iranian oil is exported by super tankers.

The final threat relates to the sea lanes and the oil tankers as they sail from Kharg Island down the Persian Gulf and through the Straits of Hormuz into the Gulf of Oman, the Arabian Sea and the Indian Ocean. The Straits are the most important choke point along this route; therefore, protection of the Straits is a major mission of the Iranian armed forces.

Knowledgeable military planners have identified two targets within the Straits: the deep water channels themselves, which can be mined, and the tankers which can be threatened or attacked in several ways. The tankers are vulnerable to artillery and missile attack from land, attacks from air, and attacks from submarines and surface ships which can use a variety of weapons, including mines, torpedoes, missiles, guns and frogmen. In short, the existence of a choke point such as Hormuz presents a number of opportunities for would-be attackers which are less readily available at other points along a sea line of communications. Perhaps the most important contingency is that the Straits of Hormuz could be mined. Mines can be laid by sea or by air and have the great advantage that they can be laid covertly by "unseen" forces. However, unlike certain other strategic straits such as the Straits of Tiran leading into the Gulf of Eilat or Bab el Mandeb or the Jubal Straits leading into the south and north end of the Red Sea, it would probably be very difficult to block Hormuz by sinking a tanker in the navigation channel. The Hormuz Straits are fairly wide and deep for effective physical obstruction.

Once tankers have safely moved through the Straits of Hormuz they face more diffuse potential threats as they transit the Gulf of Oman

and proceed into the South Arabian Sea and the Indian Ocean. When they reach the Indian Ocean they proceed in two different directions. Some bear to the east and sail for Japan and the Far East; others, the majority, proceed around the Cape of Good Hope into the South Atlantic and on to Europe and North America. Along these two sea lines of communication, different countries and political groups could pose different types of threats. Since it is reasonable to assume that conflict and competition may increase along the Indian Ocean and the South Atlantic littoral, potential threats to the sea routes in this area cannot be lightly dismissed. From the perspective of Iran, the question is to what extent it, as distinct from the U.S. and West Europe, needs a credible sea control capability beyond the Straits of Hormuz and the Gulf of Oman to help deter possible threats.

Clearly the relationship between these threats and Iran's defense programs is important. Each of the perceived threats listed above requires somewhat different military preparedness, although there are some common elements. For example, the requirements for preventing threats to Iranian oil fields include capabilities for air defense and antisabotage measures. In contrast, requirements for protecting the sea lanes in the open seas are very different and include a long-range maritime capability and a basing structure to support it. Protecting the Straits of Hormuz includes contingencies to prevent the emergency of hostile or potentially hostile regimes on the Arab side of the Gulf. Thus, Iran's occupation of the Tumb Islands and Abu Musa Island in 1971 and its participation in counter-insurgency operations in Oman have been designed to protect the entrance to the Straits and to prevent the spread of radical governments from the mouth of the Bab el Mandeb Strait, over which the Peoples Democratic Republic of Yemen exercises some control, along the southern Arabian peninsula to the straits of Hormuz themselves. Iran's military activity in Oman primarily involved the use of land forces with logistics support and reconnaissance provided by air and naval elements.

b. The Soviet Threat:

Iran shares a 1,250 mile border with the Soviet Union and most Iranians clearly regard that country as its most serious *potential* adversary because of the history of Soviet-Iranian relations and Iran's generally pro-western stance. However, given the military capabilities of the Soviet Union, the Iranians believe that in event of *direct military confrontation* between the two countries, they, standing alone, would not stand a chance. For this reason Iran's options for coping with a direct Soviet attack at the present time are limited: delay the Soviet advance as long as possible and then either accept defeat or wait for the United States to intervene.

In other words, Iranians feel that because the Soviet threat is so ominous, there is little that they can do about it except to raise the costs of a Soviet victory, contribute towards an overall western defense posture against the Soviet Union, and hope that the United States comes to its assistance if attacked. At present Iran is said to be more fearful of indirect Soviet support (1) for some of their neighbors, especially Iraq, Afghanistan and India, and (2) potentially dissident internal forces, as well as Soviet maritime activity in the Gulf and Indian Ocean, than a direct Soviet ground threat from the North.

c. The Arab Threat:

Iran, because of potential and existing military rivalries with the Arab countries of the Persian Gulf, especially Iraq and Saudi Arabia, perceives a threat from the West.

Until Iran reached an accord with Iraq in 1975, relations between the two countries were extremely poor and there was a distinct possibility that serious fighting between them might have occurred along the Iranian-Iraqi border. However, the Shah's decision to terminate support for the Kurdish insurgency coupled with the termination of U.S. covert support not only permitted a relaxation of immediate tensions but also paved the way for a settlement of the long-standing dispute over the boundary lines between Iraq and Iran in the Shatt-al-Arab waterway.

At the time of writing (June 1976) the military relations between Iran and its Arab neighbors are good. Iran has been cooperating with Oman, Saudi Arabia and Jordan in the conflict in the Dhofar Province of Oman and relations with Bahrain have improved immeasureably now that Iran has relinquished its historic claim of that important island.

However, the possibility of conflict with the Arabs in the future cannot be discounted, especially if there were to be a revolution in Saudi Arabia and the present regime was replaced by more extremist anti-Western elements.

d. The Threat From the East and the Southeast:

The possibility of conflict in the East involving Iran, Afghanistan, Pakistan and India is probably more serious than all other contingencies aside from the insurgency problems along the Arabian Peninsula and the threat to oil.

Iran is especially concerned about the centrifugal tendencies within the Baluchestan regions of southeast Iran and Pakistan. A new conflict between Pakistan and India, perhaps prompted by separatist tendencies in Baluchestan, could result in Iranian support for Pakistan since the Shah has stated that Iran would regard any attempt by India or another power to further dismember Pakistan as a threat to its own security. Although the Indian government is reluctant to openly criticize Iran's buildup, preferring to cite the U.S. and Pakistan's maritime activity, the close political, religious and military relations between Iran and Pakistan have not been ignored by Indian defense planners.

India is beginning to worry more about the possibility of maritime conflict in the Indian Ocean. Recent statements by senior Indian defense officials called for increases in naval appropriations to balance the growing capabilities of other maritime forces in the Indian Ocean.

The best empirical indicators of Iran's increased perception of the potential threat from the East, and the possibility of Iranian-Pakistani-Indian hostility, are the new basing programs which the Iranian armed forces have initiated in the central and southeastern sectors of the country. (These are discussed in more detail in Section IV.)

e. The Internal Threat:

The internal threats to Iran come from three primary sources: left wing Communist guerrilla groups (the "Red" threat); right wing Moslem guerrilla groups (the "Black" threat); and the separatist

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movements, especially in Baluchestan. So far these have all been contained by the Iranian internal security forces.

However, the most important factor which prevents the outbreak of more internal violence and separatist tendencies is the strength and loyalty of the Iranian armed forces. The Shah's decisions on weapons procurement, together with the preferential treatment accorded to the Iranian military in terms of pay and privileges, are designed, in part, to to keep the military content. This phenomenon, therefore, must be factored into any analysis of the Iranian demand for arms.

THREAT SUMMARY

The military threats to Iran's security seem to be sufficiently real and diverse to enable the Shah to justify major investments in military forces. It is, therefore, not difficult for the Shah to make a rational case for high levels of investments in U.S. equipment, and the Executive branch to respond positively, if the threat analysis is regarded as the primary determinant of procurement policy. In short, it is difficult to criticize Iran's perception that it *needs* a modern military force. What is more debatable and what will be considered in the remainder of this study is the suitability of and problems with the *particular* defense programs in which Iran has chosen to invest its resources and how these, in turn, relate to the United States.

IV. IRAN'S MAJOR DEFENSE PROGRAMS

Iran has purchased sophisticated U.S. equipment for all three military services. This section describes the growth of the Iranian defense budget and discusses some of the major programs, focusing on the nature and extent of present and future U.S. involvement in assisting the Iranians to overcome some of the problems that have emerged in their implementation.

A. The Iranian Defense Budget

The Iranian defense budget, in current dollars, has increased from approximately $880 million in the Iranian fiscal year ending March 20, 1970, to $9.4 billion in the year ending March 20, 1977, almost an 1100% increase in seven years. This percentage increase is equivalent to the U.S. defense budget going from $100 billion to $1.1 trillion in a seven-year period. The estimated total Iranian defense budget by Iranian fiscal year is as follows:

[$ millions in current dollars]

	1970	1971	1972	1973	1974	1975	1976	197
Defense budget	880	1,065	1,375	1,525	3,680	6,325	8,925	9,400
Percent increase from previous year		17	29	11	141	72	41	5

The largest percentage increase followed the oil price increase in the Iranian fiscal year ending March 20, 1974. The defense budget estimate for the current year is 616% larger than the last pre-oil price increase budget of 1972–73.

Despite these increases, the percentage of the total Iranian budget allocated to defense has decreased from 32% in 1974 to 22% in 1975 and 24% in 1976, as total Government expenditures increased from $11 billion in 1974 to $36.9 billion in 1976. The revenue increase, almost entirely from oil, was of sufficient magnitude to fund virtually all programs, civil and military; choices between guns and butter were not necessary. The increase in GNP from $10 billion in 1970 to over $50 billion in 1975 is ample evidence of the boom atmosphere.

Financial discipline also broke down with such a favorable cash flow situation. Virtually every program, civil or military, had an import component, and Iran often had to compete with other countries for commodities that were in short supply. It tended to pay top dollar to obtain what it needed, often tying itself into long-term contracts. Not surprisingly, inflation rates soared. The waste factor in the Iranian economy has been estimated by informed observers to be as high as 40% because of asysmetrical development and poor coordination among key factors such as manpower availability, infrastructure, port and rail facilities, etc.

The turndown in revenues in late 1975 has had a sobering effect, and the Shah has taken steps to restore some fiscal discipline, including an

anti-profiteering campaign, a divestiture program requiring that 49% of certain industries be sold to the workers, and a stretchout of numerous projects. The only new projects in the 1976–77 budget are in the nuclear energy field.

The defense sector has been directly affected by the revenue shortfall. For example, Iran cut back its projected purchase of Spruance class destroyers from six to four, and has placed a hold on construction of the new air and naval base at Chah Bahar; we understand that payment to a number of contractors for work already completed at the base is being held up pending further review of the budget.

For all these reasons, the defense budget is unlikely to increase significantly in future years and may have peaked in 1976–77. Iran is not expected to purchase military equipment from the U.S. or third countries at the levels of the past three years, unless barter agreements with U.S. companies to exchange additional weapons systems for offtake are negotiated.

B. Imperial Iranian Ground Forces (IIGF)

The Iranian Army is the largest and most established of the three services. It accounts for the bulk of Iran's military manpower; plans are underway for major increases in ground force strength. The Army is purchasing some of the latest American artillery and missiles, the British Chieftain Tank and Scorpian Light Tank and American and Italian helicopters.

If the planned expansion of the Iranian Army continues on schedule it will have, by 1978, an army at least twice as large as Britain's in terms of manpower, armor and army aviation. In view of Britain's former role as a major occupying power and later as policeman of the Persian Gulf, the shift in relative force levels is significant.

IMPERIAL IRANIAN GROUND FORCES (IIGF): PRESENT AND PLANNED FORCE LEVELS

	1975	1978 (Planned)
Personnel	222,720 (103%)	
Divisions	7⅔	
Tanks	1,108	[deleted]
Artillery	102	
Helicopters	327	

The budget for the IIGF for 21 March 1976 through 28 March 1977 is estimated as follows:

	Thousands
Personnel	[deleted]
Operations & Maintenance	[deleted]
Procurement/Production	[deleted]
Special Activities	[deleted]

Elements of the Iranian Army, together with support from the Air Force and Navy, have been actively engaged in counterinsurgency operations in Oman. As far as can be ascertained, its performance steadily improved in that theatre and we have no evidence of any major direct U.S. assistance in the operations.

BASING AND DEPLOYMENT

At present the deployment of the major forces of the IGF and the major bases are in the western part of the country, reflecting Iran's recent concern with the Iraqi threat. The disposition of the front line main force units is as follows:

Northwest:
- [deleted]—Rezaiyeh
- [deleted]—Sanandaj
- [deleted]—Qazvin

West:
- [deleted]—Khorensabad
- [deleted]—Kerman Shah
- [deleted]—Ahwaz

Northeast:
- [deleted]—Mashad

Over the next few years the IGF will deploy a [deleted].

There is evidence that the IIGF intends to build many of its future bases in the southeastern part of the country. One of these bases (Chah Bahar), currently under construction, will have a distinctive tri-service (army, navy, air force) character. This may be seen as a reflection of a change in threat perception from the north and west towards the south and east.

MAJOR WEAPONS PROGRAMS

The major weapons programs currently programmed for the IGF are listed in the following table:

IMPERIAL IRANIAN GROUND FORCES: MAJOR NEW U.S. PROGRAMS, COSTS AND DELIVERY SCHEDULES

Category and item	U.S. service	Orders March 1976	Deliveries	Case value (millions)	1973 prior	Fiscal year 1974	1975	1976	1977	1978	1979	1980	1981	1982
Helicopters:														
AH-1J	U.S. Army	202	108	$367.0	--	6	73	89	34					
214 A/C	do	326	57	496.8	--		7	125	120	65	9			
Artillery and missiles:														
M113A1	U.S. Army	358	--	41.7	325	--		239	11	--	108			
M109 (155mm-SP)	do	390	140	122.7	50	--	140	123	127					
M107 (175mm-SP)	do	8	--	13.1	38	--				8				
M110	do	37	--	16.2	14	--			28	9				
TOW	do	15,000+	--	103.9	2,333	--		(		12,667+	)			
DRAGON	do	10,000+	--	146.8	--					(10,000+	)			
Third country:														
Chieftain tank	United Kingdom	2,250	435											
Scorpion COMSAT RECCE vehicle	do	250												
Helicopters	Italy	312												

Compiled From a Variety of Unclassified Sources.

MAJOR U.S. PROGRAMS

The two largest U.S. programs in the IIGF are armor and army aviation. Most of the new armored vehicles are being procured from Britain (it has been reported that a total of 2,250 Chieftain medium tanks have been ordered, of which 435 had been delivered by February 1976). The British are providing support for the Chieftain program, as well as the smaller Scorpion tank, which Iran is also buying.

1. Army Aviation:

Iran intends to expand army aviation from its current level of approximately 8,000 men and 406 aircraft to 14,000 personnel and over 800 late model helicopters by 1978. The initial costs of this program for procurement, installation and training is estimated at about $4 billion.

The United States is the largest provider of helicopters for the army aviation program. This program will account for the largest single component of the U.S. personnel presence working directly with the IIGF.

The IIAA-U.S. program concept was generally agreed to in the fall of 1972; a direct/letter contract was signed between Bell Helicopter International (BHI) and the Government of Iran (GOI) on 21 February 1973 to train both pilots and technical personnel. Training started on 10 April 1973 for both groups. Because serious difficulties arose in implemeting the direct commercial contract, at the request of the GOI the Direct/Letter Contract was converted to FMS (government to government) cases on 11 March 1974.

The deliveries of the two basic U.S. helicopters (AH–IJ and 214) are scheduled to be completed by mid-1977 and the end of 1979 respectively. The original plan was that the training and maintenance programs progress from a 100% reliance on the U.S. to zero percent reliance by mid-1978. Thus the programs, which are being conducted at the Imperial Army Aviation Training Center (IIAATC) in Isfahan and the Helicopter Logistics Department (HLD) in Tehran, are approximately at the mid-point of the schedule.

As of February 29, 1976, the prime U.S. contractor, BHI, employed 1,843 personnel to provide managerial, flight and maintenance training. It is expected that this figure will increase to about 2,100 by the end of 1979. Although the majority of these personnel will will be located in Isfahan and Tehran, two additional Forward Area Support Centers to train intermediate/depot maintenance personnel will be established.

Based upon *scheduled* training, BHI will be able to phase out of the training program by mid-1978. However, in the view of those most familiar with the program, there is virtually no chance that these schedules will be met and it appears that GOI reliance upon front-line American skills, especially in automatic data processing (ADP) and engineering, will extend far beyond the April, 1978 time frame.

Already major sociological problems have arisen in the helicopter program. Some difficulties, especially those relating to the cultural differences between single male employees of BHI and the residents of Isfahan seem to have been dampened. Housing conditions for U.S. personnel have improved and there are now strict quotas for the number of single U.S. males in the program (about 10 percent).

Secondly, a strike by 140 Bell helicopter pilots in August 1975 resulted in their dismissal, further delaying the scheduled program.*

2. TOW Missile Program:

Iran purchased the TOW Heavy Antitank Weapon in 1973. The initial procurement was about 250 launchers in two FMS sales. Subsequently, it initiated an FMS case for approximately 100 more launchers. Iran has also contracted with Emerson Electronics for the co-production of up to 1,000 TOW missile launchers through 1980 and is expected to sign an agreement to co-produce the missile. The co-production program will permit the IIGF to replace the 106mm Recoilless Rifle with the TOW system in the future.

[deleted]

Depot maintenance support is provided by Iran Electronics Industries (IEI) through a contract with Hughes Aircraft Corporation. Direct and general support maintenance is provided by IIGF personnel trained in the U.S. Of the 26 personnel trained to date, 14 are still working on the TOW system. IIGF has initiated a program to train additional personnel in wire-guided missile maintenance at IEI and in the U.S. Currently 44 personnel are undergoing intensive English language training before entering maintenance training.

Since the GOI has elected to establish a depot maintenance capability for the TOW system, the IIGF will continue to be dependent upon the U.S. for the foreseeable future.

3. The M109 155mm SP Howitzer Program:

The M109 155mm SP Howitzer is not a new weapon system in the IIGF; therefore, Iran's ability to absorb this piece of equipment should be an important indicator of their overall ground force self-sufficiency. The first M109's were purchased in 1968 and delivered in 1971. More were purchased in 1972, 1973 and 1974. When all deliveries are completed IIGF will have roughly 400 M109's.

Although purchases of the M109 represent a modernization of an existing capability, extensive training in vehicle operation and maintenance has been required. This training is conducted at the Artillery School in Isfahan with the assistance of a U.S. advisor. Maintenance training is conducted at the Combat Support Training Center at Tabriz.

The self-propelled artillery system requires more maintenance and more spare parts resupply than towed weapons. The IIGF logistic system can meet the maintenance and spare parts requirements. However, it will take additional time and a continued advisory effort to make the logistical system fully effective.

ARMISH–MAAG estimates that the M109 system can be sustained with current IIGF capability and a continued advisory effort at the present level.

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*100 of the pilots left Iran and returned to the United States. 40 were rehired along with replacements for the 100 who left. The company is currently fully staffed.

SUMMARY

The major problems relating to the U.S. involvement with the IIGF concern the army aviation program. As with other advanced programs the main difficulties relate to training schedules, basing facilities, and maintenance and logistics support tasks.

The formal training schedules prepared by U.S. companies which indicate a rapid rise and equally rapid decline in the direct U.S. involvement after 1978 are not considered to be realistic by U.S. officials. From our observations and discussions we believe that the U.S. will remain directly associated with the IIAA program well into the 1980's.

C. Imperial Iranian Navy (IIN)

The IIN is the smallest of the three services; however, it plans to triple the number of naval personnel and double the number of ships in the inventory by 1978. By 1981, it plans to have at least four DD993 Modified Spruance Class destroyers operating out of a new naval base to be built at Chah Bahar on the Gulf of Oman. Chah Bahar is only 50 nautical miles from the Pakistan border and approximately 800 nautical miles from Bombay.

The strategic and political implications of the Iranian naval expansion program are potentially far-reaching and have heretofore received little attention.

IMPERIAL IRANIAN NAVY CURRENT AND PLANNED FORCES

	1976	1978	1984
Personnel	12,721	[deleted]	
Bases	6	[deleted]	
Ships	30	[deleted]	
Hovercraft	12	[deleted]	
Fixed Wing A/C	6	[deleted]	
Helicopters	15	[deleted]	

The budget for the IIN for the current Iranian year (21 March 76 through 20 March 77) is estimated as follows:

	Dollars in thousands
Personnel	[deleted]
Operations & Maintenance	[deleted]
Procurement/Production	[deleted]
Special Activities	[deleted]

BASING AND DEPLOYMENT

The IIN currently operates from six naval bases of which Bandar Abbas, Bushehr, and Khorramshahr are the most important. There is a training base at Bandar Pahlavi on the Caspian Sea and smaller bases on Kharg Island and Hengam Island in the Persian Gulf.

The largest of the new bases will be located at Chah Bahar but at the time of writing construction has not yet begun. Most of the money to be allocated for new base construction will be for expansion programs at Bandar Abbas, Bushehr and Chah Bahar. Some idea of the

magnitude of the overall expansion of IIN construction can be seen from the following table:

IIN Construction: Growth Comparison (Budgetary Estimates)

[$ Millions]

Third Plan: (1963–68)	5.5
Fourth Plan: (1968–73)	55.0
Fifth Plan: (1973–78)	1200.00

MAJOR WEAPONS PROGRAMS

The following table shows the major weapons programs for which the IIN has signed contracts. It *does not* include items of equipment that are currently under negotiation or may be considered in the future:

IMPERIAL IRANIAN NAVY: NEW PROGRAMS, COSTS AND DELIVERY SCHEDULES

Category and item	U.S. service	Orders March 1976	Deliveries	Case value (millions)	1973 prior	Fiscal year 1974	1975	1976	1977	1978	1979	1980	1981	1982
Ships:														
DD993 Spruance	United States Navy.	4		$1,466.5								2	2	
Tang Submarine	do	3		53.5						1	1	1		
MK III '65 Patrol Boats	do	19		9.6				12	7					
Helicopters:														
RH 53-D	do	6		[1] 85.7				3	3					
Missiles: Harpoon	do	200+		140.0					(		200+		)	
Third country:														
Le Combatante Missile Patrol Boats	France	12												
Logistics Support Ship	United Kingdom	?	?	?										
SH-3D	do	18	7	363.0										

[1] May increase to 115.0

Compiled From a Variety of Unclassified Sources.

MAJOR U.S. PROGRAMS

DD993 (Modified Spruance Class Destroyer)

In December 1973, the Shah authorized purchase of two anti-air warfare (AAW) configured DD963's (designated DD993) at a unit price of $238 million. In September 1974, a letter of offer for an additional four ships was signed.

In October 1975 the U.S. Navy informed the GOI that the cost of the six-ship Iranian program (including training and support) had increased from about $1.47 billion to about $2.0 billion. The GOI expressed sharp concern over the price increase. In January 1976, the GOI cancelled two DD993's and decided to limit the program to four ships. The program cost savings would be approximately $513,370,000, with an additional $35 million savings in training costs.

According to latest U.S. (June 1976) estimates the delivery of the first DD993 to the IIN is scheduled for April 1980. Deliveries of the remaining three ships will be on or about October 1980, April 1981, and September 1981. If the IIN is to introduce the DD993 into operational service in a reasonable time frame, the schedules for two major requirements—crew training, and the base, maintenance, and logistics facilities which are to be located at Chah Bahar—will have to be accelerated.

CREW REQUIREMENTS AND TRAINING

Each DD993 will require a fully trained crew of 264 personnel for a total of 1,056 for the four ships. It is estimated that at least 2,000 people must be recruited into the training program since an attrition rate of about 50 percent can be anticipated.

The original training schedule in the United States was to have commenced on July 1, 1975, with an input of 16 people per week. As of March 1976, only 23 had begun U.S. training, as opposed to about 450 who were authorized. Unless there is a marked increase in this rate, it is unlikely that the original delivery date for DD993 to the IIN can be kept if the ships are to be manned by IIN crews.

BASING FACILITIES—THE IMPORTANCE OF CHAH BAHAR

It has always been the intention of Iran to base the DD993's at Chah Bahar. However, as of March 1976, work on the naval facilities had not begun and, indeed, no contract for construction had been signed (this is not to be confused with the Air Force base at Chah Bahar, which is nearly finished). Those familiar with the program believe that if a contract for Chah Bahar were to be signed in the near future, an absolute minimum of five to seven years would be required to ready the facilities to accommodate the DD993's. This means that the very earliest Chah Bahar would be ready would be between 1982–1984. If the DD993's arrive on schedule in 1980 and 1981, an alternative home base would be needed for at least two years.

The most logical alternative base would be Bandar Abbas but for the fact that extensive modification of its facilities would be required to accommodate the DD993's. These modifications had not begun in March 1976, and we were told that no decision had been taken on this issue.

DEPENDENCE OF DD993 UPON U.S. PERSONNEL

It is presently estimated that about 344 U.S. personnel will be required by the late 1970's to support the DD993 program. Of these 14 will be uniformed personnel (2 MAAG's and 12 TAFT) and the remainder will be contractor personnel. The contractor personnel should begin to arrive in 1978 and are scheduled to remain for at least five years.

CONCLUSION

Given the slippage in both the timing and support for the DD993 program, these ships are not likely to become fully operational until the mid-to-late 1980's.

Tang Class Submarine Program

Iran has purchased three U.S. Tang class diesel submarines (late World War II vintage)—Trout, Wahoo, and Tang—for a cost of $54 million. Current plans call for the overhaul of the first submarine (Trout) in the U.S. in 1977, and the overhaul of Wahoo and Tang in 1978 and 1979. Trout would then be turned over to the IIN in early 1979; Wahoo would be delivered towards the end of 1979 and Tang in 1980.

Concurrent with the overhaul of the submarines, present Iranian plans call for the training of 500 highly qualified, sea experienced, petty officer volunteers to satisfy submarine crew requirements. This plan would provide for three certified submarine crews (300 men) and two crews to be used as replacement personnel (200 men). The first crew was due to begin training in the United States in the second quarter of 1976. However, at the time of writing (June 1976) there seem to be difficulties for the IIN in recruiting the necessary personnel given the overall demands of the fleet and the competing requirements for the DD993 program. We understand, however, that this situation is improving.

The U.S. Navy has made it clear that any slippage in the training program may increase costs and complicate the scheduled overhaul of the ships.

The IIN RH–53D Program

The IIN has ordered six RH–53D helicopters from the United States. They are scheduled to be delivered in 1976 and 1977. The Iranians hope to attain complete operational capability, a complete logistics support system, and an established depot level maintenance capability for this program by 1981. This date may well be delayed, however, because construction of the base for these helicopters at Bandar Abbas has slipped by about two years, to 1978. Use of an interim location will delay the achievement of an independent operational and maintenance capability. In addition, the support contract for 29 Sikorsky and EDO technicians had not been signed by March 1976. If these people do not arrive by the time the RH–53D's arrive in Iran, a day-for-day slippage can be anticipated. The IIN is also experiencing difficulty getting its personnel through the highly technical electronics schools which are required for the RH–53D helicopter.

TOTAL U.S. PERSONNEL SUPPORT FOR IIN THROUGH FY 81

Based upon recent estimates (April 1976) the following table reflects past, present and projected personnel figures for current contracts to provide U.S. personnel support for the Iranian Navy:

	Fiscal years						
	1975	1976	1977	1978	1979	1980	1981
Military Assistance Advisory Groups (MAAG)	17	17	27	27	27	27	27
Uniformed Personnel							
Technical Assistance Field Team (TAFT)	35	138	137	125	120	115	115
Mobile Training Teams (MTT's) (Man/Years)	4	5	6	11	11	11	6
Subtotal	56	160	170	163	158	153	148
Civilians							
Contractors							
DD 993				330	330	330	330
RH 53D			35	35	35	?	?
Tang				50	50	50	50
Stanwick [1]	200	200	200	200	200	200	200
Subtotal	200	200	235	615	615	580	580
Total	256	360	405	778	773	733	728

[1] Assumes IIN continues to employ 200 U.S. personnel under contract with the Stanwick Company.

These figures *do not include* additional American personnel that may be required in connection with any major new purchases of U.S. weapons, or the expansion of the existing programs. Nor do the figures include U.S. contract personnel who may be involved in the construction of the Chah Bahar naval facility.

Using these figures as a rough guide for the level of U.S. involvement it is possible to estimate the total numbers of Americans who will be in Iran associated with IIN programs (including dependents) by applying an overall multiplier of 3.2 to include dependents for personnel on accompanied tours:

	Fiscal years						
	1975	1976	1977	1978	1979	1980	1981
1. Total U.S. personnel (less unaccompanied TAFT's & MTT's)	217	217	202	642	642	607	607
2. × 3.2 factor	694	694	838	2,054	2,056	1,942	1,942
3. TAFT's & MTT's	39	143	143	136	131	126	121
Total	950	1,054	1,183	2,832	2,829	2,675	2,670

SUMMARY

The implications of the Iranian Navy's expansion program should be viewed in both the strategic and political contexts. In strategic terms the development of a naval force capable of sustained operations in the Indian Ocean could have an impact upon the overall balance of maritime power in the area. Iran is buying warships theoretically capable of important sea control missions along the vital oil sea lines of communication from the Persian Gulf to Japan and Europe. However, given the slippages in the DD993 program it will be years before this capability becomes fully effective.

On the political level, Iran's naval program means a growing relationship with the United States Navy. As with other programs the inevitable slippages and bottlenecks in the program could result in friction between the U.S. and Iran.

D. Imperial Iranian Air Force (IIAF)

The Iranian Air Force (IIAF) is said to be the pride and joy of the Shah. Of the three services, the Air Force has received the bulk of the funds available for modernization in recent years and is the most technologically advanced. In fact, the IIAF inventory will be one of the most modern in the world, including the F–14A with the Phoenix missile system, F–4E, F–4D, RF–4, F–5E, P–3F, and C–130H aircraft. The IIAF is assigned the usual missions of any air force, plus the air defense mission, including operation of ground-to-air missiles. Project Seek Sentry, an air defense radar network, and eight battalions of I–Hawk are on order to help fulfill this mission.

On paper the IIAF in the early 1980's would appear to be extremely potent. The ability of the IIAF to absorb and effectively utilize these systems by that time is, however, open to question.

IIAF: ESTIMATED CURRENT AND PLANNED FORCE LEVELS

	1976	1978	1981
Personnel	74,000		
Bases	8		
Squadrons	23		
Aircraft	392		
(Fighters)	(320)	[deleted]	
(Transport)	(56)		
(Other)	(16)		
Rapier Bns	2		
I-Hawk Bns	1		

IIAF PERSONNEL LEVELS

The IIAF will probably have to increase personnel levels by over fifty percent by 1981 to operate effectively the sophisticated systems that will be in the inventory at that time. The following table presents a breakdown of existing authorized personnel and projected increases in authorized levels through 1979:

[deleted]

The IIAF is likely to attain its recruitment objectives in terms of total numbers. The critical variable, however, in determining the effectiveness of the IIAF in the years ahead and its success in achieving self-sufficiency is the degree to which the IIAF can recruit and train the technical personnel required to perform operation, maintenance and logistical functions associated with its sophisticated inventory. Technical manpower requirements in the IIAF, currently estimated at about 20,000, are likely to double by 1981. The existing shortage is estimated at 7,000; it may increase to at least 8,000 by 1978 and 10,000 by 1981 as growing requirements associated with the F–14's, I–Hawk's and F–4E's outdistance the output of the training programs. Iran is becoming increasingly aware of the gap between the technical requirements of IIAF weapons system and its ability to perform them adequately. Whether this increasing awareness affects

Iran's procurement decisions on new systems under consideration remains to be seen.

BASING AND DEPLOYMENT

The IIAF currently has seven operating bases, all of which are in the northwest, west and southwestern part of the country, with three forward operating bases in the east. Under construction are three new operating bases—one at Chah Bahar on the Gulf of Oman in the southeastern part of the country, a second, Khatami, at Isfahan, and the third, Omediah, at the head of the Persian Gulf.

MAJOR PROGRAMS

The following table lists major IIAF programs for which contracts have already been signed or for which signature is imminent, e.g. Peace Log, and their status.

IMPERIAL IRANIAN AIR FORCE: MAJOR PROGRAMS, COST AND DELIVERY SCHEDULES

Category and item	U.S. service	Orders March 1976	Deliveries	Case value (millions)	1973 prior	Fiscal Year 1974	1975	1976	1977	1978	1979	1980	1981	1982
Aircraft:														
F-14/Phoenix Missile	U.S. Navy	80 a/c	10	$1,919				18	42	20				
		400+ missiles	0	282										
F-4D	U.S. Air Force	32	32	106	32									
F-4E	do	177	141	857	34	52	35	20	31	5				
F-5E	do	141	141	377		15	82	52						
F-5F	do	28	0	102					28					
RF-4E	do	12	0	143					12					
P-3F	U.S. Navy	6	6	73			6							
KC-707	U.S. Air Force	13	6	277										
747	Commerce	12	4	?										
Missiles: Maverick	U.S. Air Force	2,500	2,500	64										
SAM: I-Hawk	U.S. Army	37 Batt	16		0	2	8	(	27		)			
		1,800+ missiles	650+	600+	0	0	(		1150		)			
Radar: Seek Sentry	U.S. Air Force			58										
COMMO: Seek Switch	do			25										
Logistics:														
Peace Log	do	?		?										
C-130	do	56	56											
Helicopters: Many types	U.S. Army and U.S. Air Force.	72	34	?										

Compiled From a Variety of Unclassified Sources.

POSSIBLE FUTURE PURCHASES

The Iranian Government is considering the purchase of additional fighter, attack and special purpose aircraft. Although no decisions have been made, the Iranian Government is reported to be considering a buy of 250–300 of either the F–16 or F–18 fighter aircraft, from 2 to 6 Airborne Warning and Control Aircraft (AWAC's), additional 747 aircraft, between 4 and 10 E–2C "Hawkeye" electronically equipped aircraft, and 12 HH–53 long-range search and rescue helicopters.

U.S. PERSONNEL

The 307 Air Force TAFT Personnel are working in the following weapons systems and support areas:

Aircraft Maintenance: (127) F–4(76), F–5(51); Communications/Electronics/Meteorology (74); Logistics (62); Training & Administration (31); Air Defense (7); Command Element (6).

They are assigned to the following operating areas:

Locations or Program:	*No. personnel/ FY 76*
Doshen Tappeh	101
Mehrabad	49
Shahrokhi	40
Shiraz	23
Vahdati	35
Tabriz	19
Bushehr	25
Bandar Abbas	15
	307
I–Hawk (Army)	58
F–14 (Navy)	15
	380

MAJOR U.S. PROGRAMS

1. F–14A:

President Nixon agreed to sell the F–14 and/or F–15 to Iran during their visit to Tehran in May 1972. The U.S. Navy and U.S. Air Force actively promoted their respective aircraft. Iran decided to buy the F–14, primarily because it carries the Phoenix weapons system which is the only system capable of reaching the high flying Soviet MIG–25's that are reported to periodically overfly Iran.

Iran signed a letter of offer (LOA) in January 1974, for 30 aircraft at $845 million, and a second LOA in June 1974, for an additional 50 aircraft at $1.1 billion. Subsequent support contracts and purchase of the Phoenix missile system ($304 million) have increased the total cost of the F–14/Phoenix weapons system to $2.33 billion. As of the end of May 1976, ten aircraft had been delivered. An additional eight aircraft will be delivered before October 1, 1976, forty-two will be delivered in U.S. fiscal year 1977, and the remaining twenty by May 1978. A recent decision to reduce the number of F–14 bases from three to two, Khatami and Shiraz, has lowered the total projected system cost.

Iran will probably operate five F–14 squadrons. By 1981, it is estimated that 6,500 personnel will be required to support the aircraft, of whom about 2,650 must be technically trained.

U.S. PERSONNEL

Currently there are only 15 U.S. personnel working in Technical Assistance Field Teams (TAFT) on the F–14, two in Teheran and thirteen at Khatami Air Base in Isfahan; an increase to 23 is planned for 1977. The number of official U.S. personnel is relatively small because of heavy contractor involvement. There are 353 contractor (Grumman, Hughes, and Pratt and Whitney) personnel in Iran associated with the F–14/Phoenix program, of whom 322 are presently located at Khatami Air Base. The existing contract for contractor support expires in 1978, with peak staffing of 800 in June 1977. Grumman's contract, however, states that the company will maintain the aircraft until the IIAF is ready to take over.

The original plan called for base construction, training and aircraft delivery to coincide. Overly optimistic target dates, and 9 to 12 month construction delays in base support facilities at Khatami Air Base, have significantly affected the overall schedule. For example, delays in constructing on-site training facilities have resulted in a backlog of 200 maintenance personnel awaiting training. Grumman, as noted, estimates that self-sufficiency in in-country training and the phase-out of contractor personnel is two years away, but this is generally regarded as an extremely optimistic estimate. The need for external assistance is likely to extend into the 1980's, given the delays in nearly all aspects of the program except equipment deliveries.

Producing pilots and weapons systems officers, i.e. flight crews, is likely to be an easier task for the IIAF than producing logistics and maintenance personnel because the IIAF is shifting some of its best F–5E and F–4 air crews into the F–14, which it considers its most prestigious program.

U.S. PERSONNEL AND THE F–14 PROGRAM

	1973	1974	1975	1976	1977
MAAG					
TAFT				15	23
Contractor			26	353	537

2. F–4D/E:

The backbone of the IIAF is the F–4 aircraft. Iran has purchased 32 F–4D's ($106 million), 177 F–4E's ($857 million), and 12 RF–4E's ($143 million), all of which have been delivered except 36 F–4E's and the 12 reconnaissance planes. The F–4D's are capable of delivering laser guided bombs. All of the F–4E's will have leading edge slats for increased maneuverability, some will be equipped for the Maverick air-to-ground missile, and others equipped with an electro optical target identification system.

IRANIAN PERSONNEL

The F–4 program requires 11,000 personnel at the present time, increasing to about 25,000 by 1978 and leveling off thereafter. There will be a requirement for over 7,000 trained personnel in the air crew and maintenance categories by early 1977; projected manning, however, is likely to be about 4,000, resulting in a gap of 3,000.

OPERATIONAL STATUS

Most observers report that combat readiness in the F–4 is less than desired due to shortage of trained air crew and maintenance personnel as noted above. The training program is hampered because of (1) a limited night and foul weather training program (2) a shortage of instructor pilots. In addition, some of the most highly trained personnel are being diverted to the F–14 program.

U.S. INVOLVEMENT

In the initial stages of the program, virtually all operational training was done in the U.S. or by mobile training teams. The IIAF continues to rely on the U.S. for instruction in new tactics or on new systems that are added to the aircraft, but otherwise is self-sufficient in operations.

Maintenance and logistics support of the F–4D/E is very dependent on the U.S. personnel—MAAG, TAFT, contractor engineering technical services, and USAF logistical command assets. Many of the complex maintenance skills must be purchased from USAF schools.

There are 90 official U.S. personnel assigned to the F–4 program in FY 1976—three in the MAAG and 87 with TAFT's; the number of TAFT personnel is expected to decrease to 75 in FY 1977. McDonnell Douglas has 57 contractor personnel in Iran at the present time, most of whom will remain in FY 1977. This assistance will be required for several more years if the IIAF is to maintain its requisite number of flying hours and maintain operationally ready aircraft.

3. F–5E/F Program:

The U.S. had provided Iran with 104 F–5A and 23 F–5B fighter aircraft in the late 1960's and early 1970's, largely under the grant military assistance program. Iran is replacing the A & B models with the 141 F–5E's ($377 million) and 28 F–5F's ($102 million), the two-place version which will serve as a trainer at the Combat Crew Training Center at Vahdati Air Base. All of the F–5E's have been delivered and the first F–5F will be delivered in August 1976. The F–5E/F fighter is relatively easy to operate and maintain. Because of its experience with the F–5A/B, the IIAF should be able to absorb the F–5E/F's with relative ease compared to the more sophisticated F–14 and F–4 aircraft. The IIAF has eight F–5E squadrons.

IRANIAN PERSONNEL

This program will require 6,000 personnel by 1978. The extent to which the F–5E program will be affected by the reported transfer of some of the best air crews to the F–14 program remains to be seen. As with the other IIAF programs, the most critical shortage is trained technical personnel in the logistical and maintenance areas.

U.S. INVOLVEMENT

The IIAF is heavily dependent on official and contractor personnel, despite the fact that the F–5E is a relatively easy to operate and maintain aircraft. The F–5E was introduced into Iran prior to qualification and delivery of much of the support equipment. Also, certain

IIAF modifications precluded concurrent deliveries of spares, aerospace ground equipment (AGE) and technical data.

Thus MAAG, TAFT, and contractor personnel will be required for some time in the future to assist in providing maintenance and logistical support for the system. The IIAF is also dependent on the USAF for the development and implementation of advanced air-to-air and air-to-ground tactics.

U.S. PERSONNEL AND THE F-5E PROGRAM

	1973	1974	1975	1976	1977
MAAG	3	3	3	3	3
TAFT	30	30	45	57	28
Contractor			18	53	52
Mobile Training Team		16	5	4	

4. Improved Hawk (I-Hawk):

The IIAF has purchased 37 improved Hawk batteries, about 1,800 missiles, and a related training and support package for a total cost of upwards of $600 million.

This program is one of the largest and most complex of all programs undertaken by the Iranian military. In addition to the batteries themselves, Iran has purchased an automated fire distribution system, a full depot maintenance capability for all ground support equipment, and a missile firing range. Over 1,000 buildings in 50 locations must be designed and constructed for the I-Hawk system at a cost of over $400 million.

Sixteen batteries and over 650 missiles have been delivered to date.

IRANIAN PERSONNEL

The schedule calls for about 2,000 Iranians on the I-Hawk program at the present time, increasing to about 12,000 by 1981, most of whom must be technically trained. Trained manpower may be up to 2,500 short of required levels by 1978–79.

OPERATIONAL STATUS

The IIAF, which purchased the I–Hawk in 1973 and received its first delivery in March, 1975, is having initial difficulties in operating this system. This results from a number of factors, most notably construction delays, non-operational training equipment, lack of a formal on-the-job training program, allocation of qualified students to higher priority programs, and a faulty automated logistics system that has resulted in some instances in up to a year's delay in the supply system. Spares adequate to support the batteries already delivered are in Iran, but the IIAF logistics system is slow in locating and providing the spares to individual units.

U.S. INVOLVEMENT

The I–Hawk problems remain, despite the assistance of over 200 U.S. official and contractor personnel. Success in such a complex program depends on a phased integration of site construction, person-

nel training and system delivery. As noted earlier, there are serious delays in the first two of these areas.

Unless there is a stretchout in virtually all aspects of the program, it may fail. Alternatively, it could take nearly 1,000 U.S. technicians to ensure operational status for all I–Hawk sites *following* completion of the necessary construction.

U.S. PERSONNEL AND THE I–HAWK PROGRAM

	1973	1974	1975	1976	1977
MAAG	2	2	2	2	14
TAFT				58	63
Contractor			116	150	254
MICOM				9	24
Total	2	2	118	219	355

IIAF SUMMARY

The IIAF has clearly purchased the most advanced equipment which has prestige and deterrent value, although it is highly questionable whether such systems, particularly the F–14 and I–HAWK, will be effectively operating before the early to mid-1980's.

This acquisition pattern extends to support systems as well. The anticipated IIAF purchase of Project Peace Log (a program to develop a functional logistics organization costing $300–$500 million dollars over a number of years) will require about 14,000 Iranian personnel by 1981, many of whom will require technical training, and up to 460 U.S. contractor personnel working in line jobs in the Iranian logistics system until the entire 14,000 Iranians are trained and on duty. That the Iranians need an effective logistics system is obvious. Nevertheless, the Iranians selected the largest, highest cost option presented to it by the U.S. Air Force. Given Iranian difficulties in recruiting trained personnel, the U.S. contractor is likely to be directly involved for a long period of time.

There have been slippages in nearly all major programs due to shortfalls in training, construction, and maintenance and logistical support. As a result of the shortage of trainable personnel and other training delays, already-trained personnel are being shifted from their current programs to those of higher priority, e.g. trained air and maintenance crews from the F–5E to the F–14. The impact of this "poaching" on the lesser priority programs remains to be seen. Similarly, the better new personnel are likely to be assigned to the prestige programs, engendering further delays in programs such as I–Hawk, which are immensely complicated, but apparently of lesser priority.

In conclusion, self-sufficiency is not attainable in the foreseeable future, even if the IIAF makes no additional major purchases. Continued U.S. involvement, and a concomitant dependency of the IIAF on the U.S. is unavoidable until the mid-1980's. New purchases will further exacerbate the problems.

If the IIAF, the Shah's primary interest, faces these difficulties in surmounting manpower and infrastructure limitations, other programs that must compete for limited human and financial resources will probably experience even greater problems.

V. DEMOGRAPHIC AND SOCIO-ECONOMIC EFFECTS OF IRAN'S MILITARY PROGRAMS

A. U.S. Citizens in Iran

Estimating the number of U.S. citizens in Iran is difficult because of the lack of hard data. The U.S. Embassy estimates that there were 15,000–16,000 U.S. citizens in Iran in 1972, and about 24,000 at the present time; it expects an increase to 33,000 to 35,000 by 1980–81. The Embassy projection for 1980 seems to be extremely conservative, since the ARMISH–MAAG projects contractor personnel on existing military projects alone to be 11,000 by 1980, or 36,000 including dependents. The key point is that the trend line is sharply rising, and many informed observers believe the number may reach 50,000–60,000 by 1980. It could go higher if Iran purchases more sophisticated U.S. military and civilian products over the next few years.

After 1981, the Embassy expects the U.S. population to level off and begin to decline as civil and military projects are completed and greater numbers of trained Iranians enter the work force. Assuming no major new programs, the population trend line will certainly follow this pattern, but it is unlikely to decline very rapidly after 1981. The schedules for many projects have already slipped two to three years. Although there are varied reasons for such delays, one of the most frequently cited is the lack of trainable and trained indigenous manpower. There is no evidence that the supply of trained manpower will increase sufficiently to recoup these slippages; in short, U.S. personnel are likely to be required in large numbers for several years longer than is currently estimated.

About two-thirds of the Americans in Iran are located in Tehran. This percentage should decrease given Iranian efforts to develop industry in other areas of the country. In the future, more Americans will probably be located in Isfahan, Shiraz, Bandar Abbas, Bushehr and Tabriz.

For comparative purposes, U.S. Embassy estimates of other skilled foreign populations in Iran at the present time are:

British	6,000–7,000
German	6,000
French	5,000
Russian	5,000 (partly emigre)
Japanese	2,000
Pakistani	2,000
Indian	2,000
South Korean	1,500
Philippine	?

Most of these national groups are also expected to increase rapidly.

1. U.S. personnel in Iran (military projects)

The official U.S.-Iranian military relationship dates from World War II when the first U.S. mission went to Iran. The evolution of these missions from 1943 to the present is discussed in this section.

a. GENMISH:

The United States and Iran signed an agreement on November 27, 1943, establishing the U.S. Military Mission to the Imperial Iranian Gendarmarie (GENMISH). The purpose of the Mission was to advise and assist the Ministry of Interior of Iran in the reorganization of the Gendarmarie and to advise on organizational and training matters. The initial agreement was for two years and was extended on an annual or biennial basis until the organization was deactivated on March 21, 1976. Selected GENMISH personnel figures for the 1954–1976 period are as follows:

	Military	Civilian	Tota
1954	18	16	34
1957	19	16	35
1960	20	16	36
1962	21	16	37
1963	24	16	40
1967	23	16	39
1968	22	16	38
1969	19	11	30
1971	16	11	27
1976	16	11	27

b. ARMISH:

A second component of the official U.S. presence is the U.S. Army Mission Headquarters or ARMISH. The agreement establishing the ARMISH was signed on October 6, 1947. Its function was to work with the Ministry of War to enhance the effectiveness and efficiency of the Iranian Army. This agreement has been extended regularly since 1947.

MAAG:

The Military Assistance Advisory Group (MAAG) was established pursuant to an agreement in May 1950, to enable the U.S. to discharge its responsibilities for administering the grant military assistance program.

c. ARMISH–MAAG:

In 1958, the United States decided to consolidate the ARMISH and the MAAG into a single organization entitled ARMISH–MAAG. The consolidation was completed in 1962. In recent years ARMISH–MAAG's primary functions have been (1) to advise the Iranian Armed Forces, primarily Vice Minister of War General Hassan Toufanian, on weapons procurement; (2) to process government-to-government (FMS) sales; and (3) to assist Iran in assimilating equipment purchased from the U.S. ARMISH and ARMISH–MAAG authorized personnel levels since 1956 are as follows:

	Military	Civilian	Total
1956	382	21	403
1957	387	21	408
1958	418	21	439
1959	772	22	794
1960	683	21	704
1961	551	22	573
1962[1]	538	23	561
1963	475	21	496
1964	488	21	509
1965	452	21	473
1966	446	21	467

	Military	Civilian	Total
1967	446	21	467
1968	417	30	447
1969	402	26	428
1970	319	27	346
1971	250	22	272
1972	250	22	272
1973	192	16	208
1974	192	16	208
1975	191	18	209
1976	191	18	209
1977	191	18	209

[1] NOTE: Year the ARMISH and MAAG consolidation was completed.

d. TAFTs:

The idea of TAFTs (Technical Assistance Field Teams) originated in 1969 to provide in-country instruction to foreign personnel on specific equipment, technology, weapons and supporting systems on a scale beyond the scope and capability of mobile training teams (MTT's) and normal training programs. The initial concept resulted from the perceived problems that Iran would have in assimilating the F–4 aircraft. The concept was tested by sending 43 personnel to Iran to assist on the F–4 program.

When (1) the Iranians requested that the U.S. agree to increase the quantity and quality of its military sales on 1972, and (2) the U.S. responded favorably during the May 1972 visit of President Nixon, it became apparent that Iran would require substantial help from U.S. technicians in order to incorporate successfully the projected purchases into its forces. At that time there was also considerable pressure from the Congress to reduce the size of overseas MAAG's. To both assist Iran and to avoid increasing the size of ARMISH–MAAG, the U.S. Government signed a TAFT contract with GOI in January 1973 for 552 personnel at a cost of $16.6 million.

The Department of Defense currently makes a conceptual distinction between ARMISH–MAAG and the TAFTs, namely:

—That ARMISH–MAAG is concerned with advisory and staff functions of a continuing nature whereas the TAFT's are "short-term" teams focusing on the introduction of new equipment and associated logistics systems, i.e. "train the trainers."

—That Iran pays all expenses associated with the TAFT's and 70% of the cost of the MAAG.

—That the MAAG is largely located in Tehran whereas 40% of the TAFT's are located elsewhere in the country.

These distinctions are generally valid, but it should be noted that in the 1950's and early 1960's, when MAAG strengths were generally larger worldwide, a large number of MAAG personnel performed the same tasks currently assigned to the TAFT's in Iran.

The "short-term" description of the TAFT's in Iran also needs clarification. While any specific TAFT job or function may last only two or three years we were told that new TAFT's will be constantly required over the next five to ten years if the major U.S. military programs in Iran are to succeed. Logistical and maintenance support for major systems appears to be a primary area in which the TAFT's will continue to play an essential role.

The Government of Iran pays for all direct and indirect costs of the TAFT's, including:

—Personnel pay, allowances, and retirement;
—Special training to meet requirements peculiar to TAFT assignment;
—Transportation;
—Administrative costs associated with TAFT.

TAFT personnel levels and the dollar value of FMS support cases are as follows:

Year	Number	Value (millions)
CY 1969/72	43	
CY 1973	552	$16.6
CY 1974 (FY 75)	663	17.2
FY 1976 (15 months)	868	93.4
FY 1977 (est.)	825	120.0

2. CONTRACTOR PERSONNEL

At the present time over forty U.S. companies have personnel in Iran to work on military contracts. By far the largest operations over the next several years will be those of Bell Helicopter International (Army Aviation) and the Grumman Aircraft Corporation (F–14) in Isfahan. Each company expects to have over 2,000 employees and dependents in Iran. A July 1975 study estimated contractor personnel in Iran as follows.

	1967	1973	1975	1980/ Projection
Contractor	1,627	2,746	2,935	11,000
Dependent	3,693	6,234	6,665	25,000
Total	5,320	8,980	9,600	36,000

The best estimate as of October 1, 1975 was that the forty-four firms employing 2,941 personnel were operating in Iran. Sixty percent of these personnel were located in Tehran. Their geographical distribution is as follows:

Tehran	1,758
Isfahan	836
Bandar Abbas	163
Shiraz	82
Sharobi	53
Masjid-e-Soleman	23
Bushehr	16
Tabriz	5
Vahdati	4
Bandar Pahlavi	1
Total	2,941

A detailed list of U.S. companies and their personnel in Iran in October 1975 is at Annex B. A large and growing number of these contractor personnel are retired U.S. military, estimated as follows:

	1972	1973	1974	1975	1976
Retired U.S.	168	273	324	732	1,270
Dependents	271	322	423	834	1,662
Total	439	595	797	1,566	2,932

3. AGGREGATE DOD PERSONNEL

With over 1,200 currently authorized spaces, the DOD operation in Iran is by far the largest U.S. security assistance program in the world in terms of personnel. The ARMISH–MAAG and the TAFT account for a large part of the DOD total:

	1972	1973	1974	1975	1976	1977 (est.)
Authorized MAAG	272	208	208	209	209	209
Authorized TAFT	43	552	552	663	868	825
Total	315	760	760	872	1,077	1,034

Assigned DOD personnel in Iran, including those assigned to the Embassy, for three representative periods is as follows:

	June 1973	June 1974	February 1976
Military	750	993	1,176
Civilian	111	163	259
Dependents	?	?	(1,941)
Total DOD	861	1,156	1,435
Total DOD plus dependents	?	?	3,376

B. Socio-Economic Change

Iran's military programs are having a profound effect upon the socio-economic development of the country and will continue to do so for many years to come.

The growing requirements for trained military personnel means that thousands of young Iranians are being taught skills that have wide application throughout the economy as a whole. Furthermore, the decision by the Iranian government to use English rather than Farsi as the basic language for most skilled military operations means that virtually every young Iranian officer and many of the NCO's will have a reasonably proficient command of English. Aside from the economic and operational benefits of English as a primary language, it is a telling indicator of the degree and extent of the Iranian commitment to the United States as its primary supplier and friend.

In addition to creating new skills the military programs are also helping to develop entire new communities in sparsely populated regions of the country. For instance, the rapid growth of Bandar Abbas, which may reach a population of 500,000 within a decade, and the potential growth of the Chah Bahar base complex on the Gulf of Oman are, or are likely, to result in the development of basic infrastructure—roads, water supply, electricity, ports, houses, communications—which will have socio-economic effects far beyond the military needs of the bases. The physical growth of these bases may, in turn, act as a catalyst for population redistribution and industrial growth.

The development of Chah Bahar may have a direct impact on the long-term political stability of southern and southeastern Iran, which includes large numbers of Baluchi tribesmen. Many Iranians are concerned about potential instability in this area. If sizeable numbers of Americans were involved in construction programs in this area there could be additional problems relating to the safety of American personnel in Iran.

VI. THE SUPPLY OF ARMS

In order to understand the primary motives determining the supply of U.S. arms to Iran, a review of the U.S. arms sales process both in theory and practice is necessary. In this section the "normal" roles of the most important U.S. actors will be considered followed by a review of what actually happened in the case of major arms sales to Iran.

A. The Arms Transfer Process (General)

The United States does not have a world-wide "arms transfer policy;" therefore, there are no general clear-cut guidelines for those charged with implementing arms transfer programs on a day-to-day basis. In fact, policy-level officials believe that a general arms sales policy is not feasible and is unwise. They view arms transfers as an instrument of U.S. foreign policy toward specific regions and countries, and argue that the issue to be addressed is U.S. foreign policy toward such regions or countries and, secondarily, the role of arms transfers in support of that policy. In their view, arms sales should not be extracted from the overall policy equation and examined as an independent variable.

Officials who authorize military sales tend to base their decisions on perceived short-run political, military and economic benefits. Longer-term implications are often not taken into account.

1. THE PRESIDENT

The President has the authority to participate in or make any decisions he deems to be of sufficient importance to merit his attention. When a particular arms sale is of paramount importance to U.S. interests, the President will be directly involved, e.g. President Kennedy's decision to sell Britain the Polaris missile or President Ford's reported personal participation in sales decisions to Israel. However, normally he does not make decisions on individual sales, or even the total sales level to recipient countries. The President's involvement in arms sales is usually, therefore, indirect. He may, for example, decide to pursue policy x or policy y toward a given region or country based on options and analysis presented to him following interagency review, a National Security Study Memorandum (NSSM), in the NSC system. His decision, based on an NSSM, is set down in a National Security Decision Memorandum (NSDM), which then becomes policy. The NSDM guides the bureaucracy in implementing policy and would probably affect subsequent arms sales decision. For example, the current Executive Branch study on the Persian Gulf may result in a Presidential decision affecting arms sales to countries of the area.

Another area of Presidential involvement is in the annual budget process. Based on material presented to him by the Office of Management and Budget, the President determines the levels of grant and credit military assistance to major recipients. Although the President

does not usually decide, in the budget review, on the items to be sold, his budget decisions may influence subsequent sales decisions by the bureaucracy.

2. THE DEPARTMENT OF STATE

The State Department is charged with formulating U.S. foreign policy, including policy on foreign military sales. Policy guidance regarding arms transfers to specific countries or regions varies as to specificity and clarity.

The State Department tends to view arms transfers almost exclusively in a political contact. When a country indicates that it wants to purchase a weapons system, State's primary concern is usually the impact that the U.S. response—favorable or unfavorable—will have on U.S. relations with that country and its immediate neighbors. There is often an unstated bias toward a favorable response unless there are specific reasons for refusing to sell. Criteria for evaluating requests for arms transfers, e.g. impact on regional arms balances, level of technology to be transferred, cost, etc., are applied to requests on a case-by-case basis, but the rigor with which they are applied often depends on the perceived importance of the prospective purchaser and its neighbors.

Specific policy guidance on arms transfers is more likely to exist for countries and regions where arms transfers are not perceived to be central to U.S. foreign policy. For many years the U.S. refused to sell supersonic jet aircraft to Latin America and, indeed, today it will not sell the F–4 or comparable aircraft to countries in that region. Similar policy guidance has been promulgated for African countries, but no such guidance exists for most other areas where sales are usually reviewed on a case-by-case basis.

The State Department has divided all countries eligible for military sales into two groups:

—Category A countries are those to which the DOD may sell defense articles and services without referral to the State Department for policy guidance; countries in this group are the Western industrialized countries, e.g. most of NATO, Japan, Australia.

—Category B countries are those whose requests for purchase of defense articles & services must be cleared by the State Department. Because these sales must be referred to State, those with policy responsibilities in DOD, e.g. the Office of the Assistant Secretary for International Security Affairs, also review them.

Aside from the Secretary of State, authority in the State Department for approving arms sales is dispersed. Nominal authority is delegated to the Under Secretary for Security Assistance (U/SA) for government-to-government sales and to the Bureau of Political-Military Affairs, Office of Munitions Control (PM), for issuing licenses for commercial sales. Because arms sales are viewed primarily in a foreign policy context, those charged with overall policy responsibility toward specific countries or regions, the regional bureaus, also play a major role.

The regional bureaus report to the Under Secretary for Political Affairs. The bureaus, given their policy responsibilities, tend to view arms transfer decisions in a bilateral political context. They usually

have little expertise on the technical military aspects of proposed transfers.

U/SA and PM are more likely to examine the military implications of proposed transfers; they also have more direct contact with those offices in the DOD with similar responsibility for arms transfers, namely, the Defense Security Assistance Agency, and within the office of International Security Affairs, the regional and desk officers, Policy-Plans, and Strategic Trade and Disclosure. The U/SA relies primarily on the Security Assistance and Sales Office in PM for staff advice on government-to-government sales, and the Office of Munitions Control for advice on commercial licenses.

The relative influence of these offices in determining outcomes varies depending (1) on the issue to be decided and (2) the status within the Department of the persons holding the key offices.

In general, the more important an arms transfer decision to U.S. foreign policy toward a given country the greater the influence of the views of the regional bureaus and the Under Secretary for Political Affairs.

3. THE DEPARTMENT OF DEFENSE (DOD)

The Defense Department, as an entity, sometimes does not take positions on arms transfer policy issues (1) because it tends to defer to the State Department (particularly if there is a strong Secretary of State); and (2) because the diversity within the DOD makes it difficult to develop a unified policy position on important issues unless the Secretary or Deputy Secretary are personally involved.

The key offices within the Office of the Secretary of Defense (OSD) dealing with arms sales are the Assistant Secretary for International Security Affairs (ISA) and the Defense Security Assistance Agency (DSAA). The Director of DSAA is also Deputy Assistant Secretary for Security Assistance in ISA; thus the occupant has both policy-making and policy-implementation responsibilities.

The relative influence of these factors varies from issue to issue but on day-to-day matters the most influential has been DSAA. DSAA has overall responsibility for the management of all foreign military sales (FMS) decisions. The Director has direct access to the Secretary/Deputy Secretary. DSAA has control over all data relating to pending arms sales negotiations, the status of arms deliveries, and payments for arms sales and is also fully involved in all intra-DOD and interagency decisions on arms sales. In short, the Executive Branch and the Congress rely on DSAA for information concerning all but the most political and sensitive FMS agreements. DSAA, quite apart from its delegated authority, is therefore, in a unique position to be well informed on and to influence all aspects of arms transfer policy. DSAA personnel have access and close day-to-day relations with the military services, the State Department and the Congress, unlike any other entity within the DOD on arms sales matters. Thus DSAA has considerable influence, particularly if overall policy guidance on arms sales is lacking, is not clear, or is not periodically reviewed.

Although the Director of DSAA (wearing his ISA hat) formally must report to and through the ASD/ISA on policy matters, the distinction between policy and implementation is necessarily ambiguous. With direct access to the Secretary/Deputy Secretary, the Director of

DSAA has tended to emphasize his DSAA rather than his ISA role as Deputy Assistant Secretary for Security Assistance.

In theory, the military services do not have a major role in arms transfer decisions. Their role is limited to executing and implementing decisions within policy guidance promulgated by others; a few of their responsibilities are:

—Provide data on price, availability and lead time;
—Provide technical military advice to OSD, the JCS, the Unified Commands and the MAAG's on weapons systems, tactics and doctrine, training and logistics support;
—Conduct training, and prepare and deliver articles and services;
—Within policies and criteria established by ASD/ISA and under the direction of the Director, DSAA, execute sales agreements for approved programs.

The regional bureaus in ISA used to play a major role in arms transfers but their influence in this area has, with some exceptions, declined coincident to DSAA's rise. The bureaus maintain contact with the corresponding regional bureaus in State and their interests tend to correspond.

B. Roles of the Executive Branch Departments in Arms Transfers to Iran

1. THE PRESIDENT

President Nixon personally informed the Shah during his May 1972 visit to Tehran that the U.S. would sell either the F–14 or the F–15 to Iran. A subsequent memorandum informed the bureaucracy of this decision and stated that, in general, future decisions on other requests for conventional weapons should be made by the Government of Iran. Whether the President communicated this second decision to the Shah during the visit to Tehran is not known.

The President's decision to sell Iran virtually any weapons system it wanted was unprecedented for a non-industrial country; there was apparently no major interagency review of arms sales to Iran prior to the visit.

The decision not only opened the door to large increases in sales to Iran, but also effectively exempted sales to Iran from the normal arms sales decision-making processes in the State and Defense Departments. Insofar as is known, the May 1972, decision has never been formally reconsidered, even though the large oil price increase in 1973 enabled Iran to order much more than anyone anticipated in 1972.

2. THE STATE DEPARTMENT

The State Department accepted the President's decision and proceeded to implement it. In practice this meant that Iranian arms requests received little or no scrutiny unless they involved highly classified technology, or co-production (licensed assembly and fabrication of some parts) in Iran. Detailed analysis of such factors as Iranian military requirements, absorptive capacity, and manpower availability was considered to be superfluous, given the sweeping nature of the President's decision.

As a result of the dramatic increase in oil prices in 1973, Iranian orders increased from $398 million in FY 1971 and $524 million in

FY 1972, to $2.1 billion in FY 1973, $3.9 billion in FY 1974, and $2.6 billion in FY 1975. It became clear that Iran intended to apply a large portion of its new wealth to a massive expansion and modernization of its military establishment.

At the staff level within State there was concern about the long-range implications of an unlimited sales policy to a country with such large financial resources, but attempts to raise this concern to policy level officials were not successful. Those who were in position to know state that the senior officials of the department did not want to re-examine current policy.

Co-production requests were an exception. The staff of the Department's Bureau of Political-Military Affairs, with support from the Office of Management and Budget, initiated a review to develop criteria for evaluating the increasing number of co-production requests from Iran, e.g. Maverick and TOW missiles. Congressional concern about the impact of co-production on domestic U.S. employment, as expressed in Section 42(b) of the Foreign Military Sales Act, served to support this effort. The review led to the establishment of an inter-agency review procedure for such requests; it is too early to evaluate the effectiveness of the review procedure.

If senior officials in the State Department were concerned about reports in the last two years that Iran was experiencing problems in absorbing the equipment it had purchased, it was certainly not evident in their public and semi-public statements about Iranian military programs and the U.S. involvement. The evidence indicates that the State Department has not formally reviewed U.S. arms sales policy to Iran since the 1972 decision and continues to support it wholeheartedly.

3. THE DEPARTMENT OF DEFENSE AND THE EMBASSY

The role played by the DOD with regard to arms transfer policy towards Iran has varied since 1972—sometimes reflecting competing interests within the DOD and other times reflecting the different time frames during which different factions first became aware of major problems with Iran programs.

Secretary Schlesinger and, to a limited degree, Deputy Secretary Clements were personally involved at various times. Other elements of the Office of the Secretary of Defense (OSD) that played major roles were the Defense Security Assistance Agency (DSAA) and the Office of the Assistant Secretary for International Security Affairs (ASD/ISA). The Office of Program Analysis and Evaluation (PA&E) was concerned about the military implications of large arms transfers to Iran and the growth of the U.S. population in Iran but did not play a major role. Outside of OSD the most important actors are the three military services and ARMISH–MAAG.

The 1972 sales decision coupled with the increase in Iranian revenues following the quadrupling of oil prices created a situation not unlike that of bees swarming around a pot of honey. Defense industries, both U.S. and foreign, rushed to Iran to persuade the Government to procure their products. Each of the U.S. services, on occasion, sought to persuade Iran to buy its weapons, in part because a large Iranian "buy" of an item in a U.S. service inventory could (1) reduce the per unit costs to that service and (2) enable the service to recoup some of its prior investment for research and development.

On occasion this resulted in fierce sales competition between the U.S. services. For example, following the decision to sell either the F–14 or F–15 aircraft, the U.S. Air Force and the U.S. Navy entered into an intense competition to sell their respective aircraft. The Navy was particularly eager to sell the F–14, given its contract problems with the Grumman Corporation and rapidly rising costs.

The military services' contact with the host country on new sales is nominally to be through Unified Command and MAAG channels, following consultation with ISA and DSAA. The services, however, often worked (1) with contractors who had direct access to the Iranian military, or (2) through the service sections in the MAAG, without regard to the appropriateness of the systems they were selling to Iran, Iranian absorption capabilities, or inter-service tradeoffs.

DSAA, having day-to-day control over major arms sales negotiations and a close relationship with both the services and the contractors, also played a major role in sales to Iran.

Since a primary function of DSAA is to execute sales programs consistent with policy guidance, and such guidance with regard to Iran dictated a positive response to most sales requests, DSAA also played a salesman's role. The 1972 Presidential decision coupled with the Iranian appetite for arms unleased commercial and official arms salesmen.

By 1975, however, problems associated with the *implementation* of policy had become serious. Those responsible for implementing policy, i.e. DSAA, the Services, the Embassy, and the MAAG, stated, justifiably, that they were carrying out the policy directive of the President and Secretary of State. DSAA's job is not to review policy. Nevertheless, in early to mid-1975, DSAA became sensitive to attempts by others within the DOD to surface the problems of implementation and, indirectly, question policy. This was due to two somewhat different reasons. First—the one cited above—DSAA could claim that the President and Secretary of State had determined U.S. policy toward Iran. Second, any challenge to current policy within the DOD could be interpreted as a challenge to the power and authority of DSAA.

The Near East and South Asia (NESA) region of ISA has primary responsibility for formulating DOD policy in the Middle East and South Asia. It maintains close liaison with the Near East Bureau in the State Department and other offices in the DOD who have direct interests in the region. However, NESA was not in a position during the 1974–75 period to challenge seriously prevailing policy or the resultant arms sales activities of the services, DSAA and the contractors, even though there were those in NESA who were becoming increasingly concerned about that policy. Iran, for example, was never added to the list of Middle East countries whose military requests were regularly reviewed by the Middle East Task Group (METG), chaired by the Deputy Assistant Secretary of Defense/NESA. The METG was initially created to review military sales to Israel and the Arab countries. The membership of the METG includes representatives from all major offices within DOD, including DSAA. Major requests for weapons purchases from METG countries received careful examination.

The Office of Policy Plans and NSC Affairs in ISA, with the encouragement and support of the ASD/ISA and his Principal Deputy,

undertook in early 1975 a mid-to-long term policy analysis of U.S. arms transfers toward the Middle East. This study recommended that an immediate review of U.S. Persian Gulf policy be undertaken, focusing on the political and strategic benefits and costs in various time frames of current U.S. policy.

About the same time, in May 1975, the NSC directed a review of overall U.S. arms transfer policy to be completed by June 25, 1975. Many of those involved in the project came to believe that the senior NSC officials were not interested in a serious analysis of arms transfer issues or an in-depth examination of the nuances and implications of U.S. arms transfer policies to the Middle East and Persian Gulf areas, the focal points of the study.

Although the mandate and scope of this study was subsequently expanded to permit a wider and more analytical review of policy, endless disagreements delayed the response; a formal submission to the NSC has still (June 1976) not been made.

The checkered history of this review is illustrative of the growing diversity of opinion on arms transfer issues within the Executive Branch. Several factions had emerged within the DOD. The "critics" of current policy (i.e. those calling for a major review of policy) had differing motivations. Some (ISA-Policy Plans, ISA–NESA and PA&E) argued that the long-term military and strategic consequences of the Iranian FMS program needed more careful analysis. Others more directly involved in implementation of sales were critical because of the impact of Iranian and other Middle East arms sales on the U.S. armed services. The Joint Chiefs felt that the draw-down of U.S. inventories for the Middle East was impacting adversely upon the readiness of the U.S. military. The three military services were becoming aware of the impact of arms transfers upon their own manpower requirements as they realized that more uniformed personnel would be required to help FMS recipients absorb the large quantities of arms they were buying. The Installations and Logistics (I&L) branch of OSD was becoming very sensitive to the long-term problem of providing spare parts and general support for the burgeoning sales programs (most large FMS recipients participate in the integrated U.S. logistics systems, as though they were U.S. service customers).

In contrast to the DOD "critics" during the 1972-early 1975 period, DSAA tended to support existing U.S. arms transfer policies.

a. Role of the Secretary of Defense and the Assistant Secretary for International Security Affairs

Throughout the 1973–75 period, different attitudes on the Iranian question were emerging from these important offices. It seems clear that Secretary Schlesinger and Assistant Secretary/ISA Ellsworth were becoming increasingly skeptical about the management of Iran's FMS programs and therefore more concerned about the impact of future sales.

Secretary Schlesinger has stated that, during his tenure of office, he perceived a general problem with respect to U.S. arms sales policy—namely, that the boom in the arms market provided major incentives for U.S. industry and the armed services to push sales which, in time, might result in the dumping of unnecessary and very sophisticated equipment upon unsuspecting recipients. This, he felt, would lead to problems of resource allocation and assimilation for the

recipient, potentially eroding long-run confidence in the DOD as the main agent for U.S. arms sales. In the case of Iran, this could raise serious policy questions regarding the credibility of the United States Government. If Iranian defense resources were badly allocated, the operational effectiveness of its forces would be downgraded with adverse effects upon the regional security posture.

Schlesinger expressed his view that the DOD, and OSD in particular, should act as an "honest broker" between the GOI and U.S. industry, fending off the inherent pressures from the U.S. services and industry to sell sophisticated arms, regardless of whether Iran needed or could handle them. Schlesinger has stated that he wanted to ensure that would-be recipients of U.S. arms be given complete briefings, i.e., be told what it takes to utilize a given system effectively, including potential problem areas. This procedure, he believed, would at least give the U.S. the option of saying "you were warned" if things did begin to go wrong.

In late 1973, Schlesinger briefed the Shah on some of the implications of buying sophisticated U.S. hardware. In response to the Shah's request for assistance, Schlesinger sent Richard Hallock, a retired Army Colonel to Iran as his unofficial representative, on a consultant basis (ARPA contract). Hallock was to report directly to the Secretary, or indirectly through Martin Hoffman, then General Counsel of the DOD, Admiral Ray Peet, former Director of DSAA, or his successor, General Howard Fish.

We understand that Hallock's role was (1) to provide the Shah and General Toufanian with independent analyses on weapons procurement and (2) to keep Schlesinger informed of the Shah's views and/or problem areas as they developed. It was apparently Schlesinger's hope that Hallock's advice to the Shah might serve as a counterweight to the hard sales tactics of industry and, on occasion, the services.

Hallock operated outside of the DOD chain of command, in part because he and the Secretary suspected that some DOD components may be functioning primarily as salesmen rather than advisors.

Hallock established a close relationship with the Shah, General Toufanian, senior U.S. Embassy officials, and other Embassy officers concerned with military programs. The Government of Iran apparently developed a high sense of confidence in Hallock's advice while Hallock simultaneously provided Schlesinger with reports on what the contractors, services and the MAAG were doing in Iran.

At the same time that Schlesinger was reviewing reports on conditions in Iran from Hallock, Robert Ellsworth, Assistant Secretary of Defense for International Security Affairs, was also becoming aware of problems in Iran. With Schlesinger's approval in March 1975, he appointed a Special Assistant for Iranian Affairs in ISA to examine DOD activities in Iran.

The Special Assistant's first task was literally to find out what was happening in Iran. He worked for six months with a small staff and prepared a report for Ellsworth. The report was not made public and not distributed within the DOD. Informed sources have stated that the report recommended that an office be created within ISA to deal exclusively with Iran. Secretary Schlesinger subsequently sent a memorandum to the President that, we understand, reviewed DOD activities in Iran and noted DOD's concern over emerging management problems in the sales program.

Schlesinger, it appears, finally decided against a proposed office in ISA to deal with Iran. For several months, he and Hoffman had felt, however, that a high ranking civilian, a Secretary of Defense representative, was needed in Iran. The Secretary during this period also consulted frequently with the Director of DSAA.

The official selected was Eric von Marbod, a former Comptroller of DSAA and Principal Deputy Assistant Secretary (Comptroller) of OSD, who had been the DOD official in charge of the Vietnam withdrawal and the South Vietnamese refugee program. Approval was sought, and obtained, to send von Marbod to Iran in September 1975.

*b. Role of the Embassy**

We were told that the U.S. Embassy in Tehran, which had worked closely with Schlesinger's unofficial representative Hallock, initially opposed the appointment of a Senior Defense Representative for the following reasons:

—Concern that the appointment might lead to a more independent DOD operation in Iran;

—It felt that any effort to change arms policy or management thereof was the responsibility of the State Department;

—The Embassy felt that the key management and coordination problems were in Washington, not Tehran. Sending a Senior Representative appeared to be treating the symptoms rather than the cause.

The Embassy had strongly supported the 1972 policy decision, but Embassy officials felt that they were losing control of the situation in the 1973–75 period when the official and commercial salesmen flocked to Iran following the increase in oil prices. The Embassy did not feel that it was fully informed on what was going on, and may have suspected that some elements of DOD were cooperating with the contractors in promoting sales.

Embassy officials believed that the solutions to these problems had to come from the State and Defense Departments in Washington. In fact, Embassy officials sympathized with the plight of a two-star MAAG chief charged with coordinating the U.S.–Iran military relationship while the Army, Navy, and Air Force were often pursuing their own objectives through the service sections of the MAAG. (See Annex C for details of official high level visits to Iran.)

By early 1975, the Embassy perceived the emerging management problems but responsible staff officers did not feel that it was in their province to question basic policy guidance. We believe that they were reluctant because:

—The Embassy may have operated on the assumption that senior officials in the State Department were not interested in information or opinions that questioned general policy toward Iran;

—The views of successive MAAG chiefs apparently varied as to the extent of the problems associated with Iran's assimilation of the equipment it purchased;

—Everyone seemed to be basically pleased. The Government of Iran was getting the equipment it wanted; the State Department was happy because U.S.-Iranian relations were good; DOD was actively selling in accordance with policy; the contractors were pleased because they were making money;

*The authors regret that they were unable to schedule an interview with the U.S. Ambassador to Iran, Richard Helms, due to mutually conflicting travel schedules.

—The State Department had never been deeply involved in the management and implementation aspects of arms sales; the Embassy, with limited staff resources, may have decided to devote its energies to higher priority interests of the Department.

It is clear that the Embassy's primary concern paralleled that of its superiors in Washington—namely, preserving the good U.S.-Iranian relationship created, in part, by the 1972 decision. The Embassy's primary concerns about problems with military sales and program management seemed to be (1) that the Embassy be fully informed of what was going on, and (2) that DOD efforts to correct the situation be under Embassy control and be presented in a manner that could not be interpreted in any way by the Iranian Government as reflecting a change in basic policy.

c. Role of the Defense Representative in Iran:

The Embassy ultimately accepted the appointment of von Marbod and upon his arrival, Ambassador Helms told him that he had his full support. The MAAG was initially skeptical of the appointment because it interpreted the appointment of an official civilian representative who outranked the MAAG chief as a vote of no confidence.

Mr. von Marbod arrived in Iran in September, 1975, on a one-year appointment with terms of reference which were carefully negotiated both within the DOD and with the senior State Department officials. Before leaving Washington von Marbod had discussions with Schlesinger, Ellsworth, General Brown, Chairman of the JCS, General Jones, Air Force Chief of Staff, and General Fish. He stopped at U.S. European Headquarters in Stuttgart on the way to Iran and met with General Huyser, Deputy Commander in Chief, and General Ryder, head of the Security Assistance Directorate. Shortly after Mr. von Marbod arrived in Tehran General Vandenberg, the chief of ARMISH–MAAG, was relieved of his post for unexplained reasons. He was replaced by Air Force Major General Miles, who arrived in March 1976.

The Defense Representative, having no staff or support upon arrival, sought to work with ARMISH–MAAG and allay its initial resentment over his appointment. This task was probably facilitated by the vacancy at the head of MAAG mission. Apparently he was successful, perhaps because he made a special point of working with the MAAG and reported through military channels to Washington, in direct contrast to Schlesinger's previous unofficial representative.

The mission of the Defense Representative was (1) to identify problem areas; (2) to recommend solutions; and (3) to see that DOD play the "honest broker" role that the Secretary deemed critical to the credibility of the DOD and the U.S. Government. He was guided in his mission by the following considerations:

—It was important that the Government of Iran carefully manage its defense resources given that oil revenues were (by 1975) not keeping up with defense costs;

—That Iran's procurement decisions had led to problems of assimilation, burdening Iran's manpower and infrastructure resources;

—That the U.S. should help the Iranian Government to reach decisions that will maximize return on its defense dollar and minimize associated burdens.

Mr. von Marbod's first and most important task was to ensure that the Iranian Government be fully informed on a routine basis about all perceived problems and constraints concerning the introduction of a new U.S. weapons system.

His second task was to develop factual, objective presentations for review by the Iranian Government of actual or potential problem areas with systems already under contract, e.g. construction of support facilities, manpower and logistics shortfalls, thus presenting the "complete picture" to the Government of Iran. While doing this, however, the Defense Representative had to make clear that procurement decisions were still the responsibility of the Iranians, and that his mission did not represent a change in basic U.S. policy.

In this connection, Deputy Secretary Robert Ellsworth (promoted from ASD/ISA by the new Secretary, Donald Rumsfeld) issued a directive to all components of DOD on February 24, 1976 (1) outlining some of the problems encountered in implementing programs in Iran; (2) stating that it is essential that all DOD components seek to achieve objectives similar to those outlined earlier in connection with the Defense Representative; and (3) delegating to the Assistant Secretary for ISA primary responsibility for addressing policy issues, making recommendations for decision by the Secretary or Deputy Secretary, assuring effective policy coordination with the Department of State, and exercising policy supervision over, and coordinating security assistance with other DOD activities in Iran. The Ellsworth memorandum was not intended to suggest a shift in basic U.S. or DOD policy toward Iran, but to ensure that all proposals were rigorously examined in DOD prior to submission to the Department of State. A thorough review would also generate the data needed to inform accurately the Government of Iran on all aspects and ramifications of systems it proposed to purchase.

Ellsworth, who earlier had favored creation of an Office in ISA dealing exclusively with Iranian Affairs rather than sending a Defense Representative to Iran, moved following Schlesinger's departure to establish such an office. Presumably this office will carry out the authority delegated to ISA in the February 24 directive. At the time of writing (June 1976) it is too early to evaluate its effectiveness.

The Defense Representative has apparently had some success in his efforts to "routinize" security assistance programs in Iran. If the Ellsworth directive is implemented, programs will be adequately scrutinized by the DOD in Washington, and communicated to the Government of Iran through the proper channel, i.e. the MAAG, and implemented by DSAA and the services in an objective manner. It should be noted that until very recently Richard Hallock, Secretary Schlesinger's unofficial representative in Iran until the appointment of Eric von Marbod in September, 1975, was employed, as a private citizen, by General Toufanian. He was apparently advising the General on weapons procurement matters.

VII CONCLUDING COMMENTS

A. U.S. Interests and Iranian Security Policy

The prevailing view within the Executive Branch is that the United States has a major interest in a strong, pro-Western Iran for political, economic and strategic reasons:

—It is a large, populous, resource-rich country located on the periphery of the Soviet Union and between the Near East and South Asia;

—The flow of oil from the Persian Gulf is vital to the economies of Western Europe and Japan and to a lesser extent the United States itself;

—A hostile presence or political instability in Iran or the lower Gulf region could threaten access to this oil;

—U.S. trade with and investment in Iran is large and growing.

The foregoing perception of U.S. interests combined with a policy decision by the U.S. in the late 1960's not to replace the British with a direct U.S. presence in the Persian Gulf, and Iran's desire to develop a deterrent capability to protect its own interests and oil lifeline, are the factors that explain the positive U.S. responses to Iranian arms requests.

However, the sweeping nature of the 1972 Presidential decision to permit the Shah to purchase without prior review led to problems, many of them unanticipated. The evidence indicates that the 1972 decision was not reassessed following the oil bonanza in 1973; apparently senior officials did not believe that the increase in Iranian oil revenues fundamentally changed the reasons for the 1972 decision. Hence, the U.S. sought to avoid short-term negative political repercussions that might have resulted from occasional negative sales decisions at the cost of contributing to future problems associated with high levels of sales. The Executive Branch began to lose control of the situation.

Since the late 1960's the U.S. Government has been both arms salesman and adviser to Iran. These roles have not been easy to reconcile. ARMISH–MAAG was supposed to offer professional, neutral advice on arms acquisitions; at the same time the military services to whom ARMISH–MAAG reports and the civilian contractors, who are in frequent contact with ARMISH–MAAG personnel, had strong interests in selling weapons systems for their own purposes. Given the 1972 decision, the salesman's role often predominated.

One significant reason advanced by Executive Branch officials to explain U.S. policy is that since Iran had other sources of military supply and was a leader of OPEC, the U.S. should not confront the Shah concerning the difficulties that would be incurred in absorbing his proposed acquisitions. This attitude probably underestimated U.S. leverage with Iran, or rather, the importance that Iran placed on its relationship with the United States. There is no question that Iran would have purchased equipment from other suppliers if it determined

that a given capability was vital and the U.S. refused to sell it. In the case of the F–14 and F–15, however, there were no comparable alternatives available.

Iranian officials regard the relationship with U.S. as vital to Iranian interests. If Iran is attacked by the Soviet Union, they believe that the survival of Iran would be dependent on U.S. intervention; no other country has the capability or the will to assist Iran in this ultimate contingency. Thus Iran appears consciously to view the defense link with the U.S. as a form of insurance. Iran may, and has, purchased equipment from third countries, but it is very doubtful to most observers that Iran would have risked its U.S. relationship had the U.S., as a good friend, openly and forthrightly given its unvarnished opinion on several of the proposed large-scale purchases.

B. Policy Implications of U.S. Military Involvement in Iran

Barring a dramatic change in Iran's leadership, the future course of the U.S.-Iranian military relationship is already being determined by the level of U.S. activity in the country. Iran has invested so heavily in American weapons and technology that through the early 1980's it will have to rely upon American maintenance and logistics support to the extent that most Iranian decisions regarding a major and sustained use of military power must inevitably take into account attitudes of the United States.

The two most potentially difficult issues that, in the future, may confront U.S. policymakers as a result of this relationship are: (1) what to do if the current programs run into further trouble and Iran requests an even deeper U.S. involvement and (2) what to do if, on the contrary, the Iranians are in a position to use sophisticated equipment effectively in combat and, in fact, do so. In both cases there is the potential for friction or serious tension in U.S.-Iranian relations.

The first issue may arise if Iran is unable, over time, to develop the trained personnel and the support infrastructure to utilize effectively the large amounts of sophisticated military (and civilian) equipment that it has purchased. If the weapons systems do not "work," Iran may blame the United States for the fact that its equipment is not fully operational.

It is necessary to be more precise about what is meant by "fully operational." Based upon the record to date, there seems to be no doubt that Iranians are capable, in time, of operating their current inventory under normal "peace time" conditions. They will probably not operate most systems as effectively as would a similar U.S. unit, but it is their own definition of success that is important. There are questions, however, as to (a) how well they would perfrom under "war time" conditions, and (b) how dependent they will continue to be upon active U.S. participation in the maintenance and logistical support of their equipment in both "peace time" and "war time" conditions. For example, informed U.S. personnel believe that it is unlikely that Iran could engage in major combat operations during the next five to ten years with its current and prospective inventory i.e. purchase to date, of sophisticated weapons (as distinct from some of the less sophisticated ground equipment) without sustained U.S. support.

It will be recalled that Iran faces different types of threats to its security. In this report a distinction has been made between "high" and "low" intensity threats, or conflicts, and whether or

not these threats or conflicts were likely to be of "long" or "short" term duration. If a further distinction is made between what might be termed "sophisticated" and "less sophisticated" American weapons, it follows that, at least for the next ten years, Iran has the possibility of engaging in "high" or "low" intensity conflicts for "long" or "short" duration using "sophisticated" or "less sophisticated" U.S. weapons. (For illustrative purposes the distinction between "sophisticated" and "less sophisticated" U.S. weapons is a function of the level of U.S. support required to make them operationally effective over the next ten years. Thus, the F–14/Phoenix system and the DD993 Spruance class destroyer fall under the category of "sophisticated," whereas the C–130's and the M113 armored personnel carrier would be classified as "less sophisticated.")

From these simple definitions the following proposition can be suggested:

> The higher the level of intensity of conflict and the longer its duration, the greater the probability that "sophisticated" U.S. arms will be used, thereby requiring direct U.S. support. Conversely, the lower the intensity of conflict and the shorter its duration, the lower the probability of the use of "sophisticated" U.S. arms and direct U.S. support.

Between these two extremes are many other options, which, in all likelihood will be those to materialize over the next ten years. Iran can probably continue to fight insurgency-type wars (such as Oman) without *direct* U.S. participation but once the fighting requires the use of sophisticated U.S. weapons, the involvement of U.S. personnel becomes unavoidable, if such weapons are to be used effectively. (It should be pointed out that the Defense Department Directive on Technical Assistance Field Teams (TAFT's) states that: "TAFT personnel will not engage in or provide assistance or advice to foreign forces in a combat situation. Additionally, they will not perform operational duties of any kind except as may be required in the conduct of on-the-job training in the operation and maintenance of equipment, weapons, or supporting systems.")

At this point it is important to elaborate on what is actually meant by U.S. "involvement." This includes activities performed for the Iranian armed forces by *uniformed* or *contractor* personnel who participate in two types of roles: (1) advisory and managerial; (2) logistics and support. Each of these roles can involve either: (1) *front line service* with the Iranian military in the field or at Iranian bases; or (2) a *supporting role* in Iran at rear bases and headquarters, or U.S.-based logistical support.

From a political perspective, U.S. uniformed personnel actually helping the Iranians maintain F–4's and F–14's in day-to-day combat is quite different from providing long-term logistics support from the United States; phrased differently, the greater the possibility of Americans, especially uniformed Americans, being drawn into fighting, the greater the immediate political problems.

Thus, while it is true that a "visible" U.S. involvement entails greater political risks, the less controversial but nonetheless real involvement resulting from a common logistics base also has important political and military implications for the United States. Although it is correctly assumed that the United States has less influence over the choice of systems purchased by a country on a cash basis than those

provided under the grant military assistance program, it is less appreciated that recipient countries, such as Iran, are taking advantage of certain economies of scale that come from buying into the U.S. armed services logistics systems. In practice, this means that an Iranian logistics officer obtains spare parts for the F–4 aircraft in the same manner, within the same system, as does a U.S. F–4 logistics officer. The net result is that the Iranian forces are, in many instances, integrated into the U.S. logistics and support system. In theory, therefore, the U.S. Air Force has the ability, literally, to halt the operations of the IIAF over time by cutting off spare parts. While Iran has greater freedom to choose the weapons it buys, its freedom to operate that equipment is, in the last resort, dependent upon the good graces of the U.S. Government.

This dependency can only grow as recipient countries such as Iran buy increasingly sophisticated U.S. weapons systems. Iran cannot become "self-sufficient" in F–4E or F–14/Phoenix operations anymore than a local automobile dealer can become independent of Detroit. Understanding the umbilical relationship between the supplier and recipient of advanced weapons becomes particularly important in view of the frequently heard arguments that a recipient such as Iran or Egypt can easily "switch" suppliers if it is not satisfied with its treatment by a supplier. Theoretically, this is true, and there are undoubted political advantages in stressing this option; in reality, however, once a recipient has committed itself to a particular supplier for the maintenance of its active combat forces, it can only "switch" at the risk of losing its operational capabilities for a very long time. More specifically, if there were a revolution in Iran and the Shah were replaced by an anti-U.S. regime, that regime would find it virtually impossible to maintain the current inventory of U.S. weapons without sustained cooperation with the United States. This might moderate a new regime's policies. However, if the regime were intent upon eliminating the U.S. role and presence in Iran, the United States could retaliate by bringing Iran's military machine to a virtual standstill.

While the U.S. could "ground" Iranian forces (particularly the Air Force), its ability to do so is circumscribed by the political implications of such an act. The U.S. has been and is the largest seller of arms in the world. The forces of many nations are almost entirely equipped with U.S. weapons and are, consequently, dependent on the U.S. for follow-on support. Indeed, the U.S. Government often provides assurances that new weapons systems can be supported throughout the "lifetime" of the equipment purchased.

A decision by the U.S. to terminate such support to Iran in a combat situation could cause other past or potential purchasers to call into question the wisdom of relying on the U.S. as a military supplier. The ramifications of such a decision would not be limited to Iran. Senior Iranian officials, for example, have indicated that Iran's decision not to stretch out delivery schedules of equipment it has purchased from the U.S., notwithstanding its unreadiness to receive the equipment, is in large part based on lessons learned from the 1974 U.S. embargo on arms sales to Turkey.

Countries such as Iran, who are deeply involved militarily with the U.S., seem to have, therefore, a curious kind of "reverse influence" on the U.S. (the original U.S. decision to sell arms to Iran was based, in part, on the presumed influence that an arms relationship would pro-

vide the U.S. in and over Iran). The effect of this "reverse influence," is to seriously limit, in political terms, the ability of the U.S. to exercise the policy option of cutting off military support to Iran. This option is thus limited to extreme situations such as an Iranian military involvement that is diametrically opposed to or threatens important U.S. interests.

C. The Executive Branch Decision-Making Process on Iran Arms Transfers

Some important general lessons can be drawn from the Iran experience concerning the U.S. arms transfer decision-making process.

WASHINGTON

At the most conceptual level it can be argued that once a potential recipient of U.S. arms assumes, for whatever reason, great importance to the U.S., the "normal" arms transfer review processes that determine whether or not to sell what types of goods and services in what numbers become less relevant. Decisions on arms sales to such countries are often taken at the highest level (President and Secretary of State) and must be viewed differently from more routine arms sales.

In the case of Iran, absent any other explanation or evidence, it must be inferred that the 1972 decision was based upon broad geostrategic and political considerations rather than exacting calculations about the balance of military power in the Persian Gulf. When arms decisions are made at the highest level, the probability that potential future policy and programmatic problems will take a back seat to perceived tangible political benefits is increased.

Once the basic policy decision was made, the Iranian armed forces, the U.S. Defense Department and private U.S. defense contractors became the primary actors. The ensuing problems might never have occurred but for the hike in oil prices in 1973 which gave Iran the means to buy *far more* arms than had been anticipated at the time of the decision. The increased oil revenues made billions of dollars available for new military orders. The immediate effect was to increase the stakes in arms to sell to Iran.

The overall effect was to overwhelm the U.S. Government systems that normally execute routine arms sales. The only institution in the United States (or Iran) capable of managing and monitoring this boom in sales was the Department of Defense. During the period 1973–75, various factions within the DOD, especially the Navy and the Air Force, pursued their own, often competing, objectives with respect to major sales to Iran. "Alliances" between private industry and the procurement branches of the Air Force and Navy resulted in major sales efforts in Iran. In practical terms, it would have been extremely difficult for the U.S. Embassy in Tehran, ARMISH–MAAG, the policy desks in State and DOD and DSAA to exercise control over events had they chosen or been able to do so.

Thus for a period of time a situation approaching anarchy existed within the Executive Branch. A telling indicator of this is that when Schlesinger and Ellsworth came to the conclusion, somewhat independently, that all was not well with DOD activities in Iran, their respective efforts to deal with the problems were not fully coordinated. If the DOD leadership was in doubt over what was actually happening in

Iran, it would be unreasonable to expect other Executive Branch agencies to be better informed.

Once the various elements in the DOD, including those responsible for program implementation, began to recognize the extent of the problems of the FMS program in Iran, Schlesinger and Ellsworth began to exert policy level control over the entire operation. The appointment of a Defense Representative to Iran in September 1975 by Schlesinger, and the issuance of a directive by Ellsworth in February 1976 on DOD activities and interests in Iran were intended to ensure coordination within the DOD, and were seen as first but essential steps to bring the situation under firm policy control within the DOD.

Since the expertise on weapons systems management, logistics, training and manpower requirements is in Washington, not Iran, all DOD departments and agencies, including the services who are involved in programs in Iran, are now required to cooperate and provide analytical backup in support of the Defense Representative's tasks in Iran.

The foreign policy problems resulting from the U.S. military involvement in Iran have been less explicitly noted in the State Department and the White House. However, the current review of U.S. policy in the Persian Gulf, at least acknowledges the need for a reexamination of policy.

IRAN

In Iran the major difficulties with *current* U.S. defense programs relate to some but not all of the so-called "back end" (implementing) operations—logistics, maintenance, training, etc. This is now clearly recognized within U.S. defense circles, and has been communicated to senior Iranian officials by the U.S. Defense Representative in Iran. If the Defense Representative's mandate is to be performed effectively and routinely, ARMISH–MAAG will need to have a larger percentage of its personnel trained in weapons system management, planning, and resource management. General Miles, the current Chief of ARMISH–MAAG, has a weapons systems management background himself and acknowledges the importance of such expertise. Whether the three services respond remains to be seen.

The DOD's task is particularly difficult (1) because the U.S., directly or indirectly, is responsible for not having fully briefed the Iranians on the implications of its proposed purchases, and (2) because the issues are politically sensitive in that the responsibility for many of the current problems and delays lies ultimately with the Iranians. On the whole, the U.S. Government and U.S. contractors have met their schedules but the Iranians have not. Indeed, one of the most serious problems is that the delivery schedules for U.S. equipment have been on time while Iranian training and construction schedules have slipped, and the entire support infrastructure in Iran, is inadequate. The Iranian armed forces are working diligently to overcome these obstacles; the tasks confronting them, however, are enormous.

That Iran is considering additional purchases of large quantities of sophisticated weapons, perhaps on a barter basis, indicates that Iran has not altered its "front-end," i.e. new purchases, policies because of the "back-end" difficulties of which it is now fully aware.

APPENDIX

A. High Level Visitors to Iran

There have been numerous high level visitors to Iran in the 1973–76 period, particularly U.S. military general officers. Although the purpose of most of these visits is not known, and not all relate to the military sales program, the intense interest in Iran of various offices in the DOD and the military services is evident.

By contrast, the number of State Department visitors is much lower. The reasons for the difference may be merely that there are more general officers with larger budgets than State Department officials. The difference may also relate to the diversity of the defense programs in Iran.

On the other hand, it may also reflect the interest of the services in making new arms sales to Iran or in troubleshooting problems that emerged in implementing the programs after a sale had been made. The most significant point regarding the list of State Department visitors is the absence of a single visitor in 1974–75 from the Bureau of Political-Military Affairs, the Bureau charged with overseeing arms sales programs and dealing on a day to day basis with OSD/ISA and DSAA in the Pentagon.

List A contains visits by general officers and other senior officials between September 1, 1973 and March 19, 1976, for which ARMISH-MAAG had primary responsibility.

List B contains senior State Department visitors in 1974–75.

LIST A.—GENERAL OFFICER AND OTHER SENIOR LEVEL VISITS: 1 SEPTEMBER 1973/19 MARCH 1976

Visitor	Service	Title	Dates
RADM Dowd	USN	Ch, Navy Supply Systems	2–8 Sept 73
GEN Catton	USAF	Cdr, AFLC	7–9 Sep 73
RADM Hanks	USN	COMIDEASTFORCE	10–14 Sep 73
RADM Gerhard	USN	Dir, OPS 63	Sep 73 (Date unknown.)
BG Healy	USA	CG, JFK Center for Mil Asst	13–17 Sep 73
MG Appel	USA	Dir, USEUCOM	15–17 Sep 73
MG Stoney	USAF	Cdr, AFCS	25–27 Sep 73
BG Gordon	USAF	Cdr, 1035 Tech Ops Gp	10–12 Oct 73
MG Locke	USAF	Hq Cmd, USAF	12–15 Oct 73
LTGEN Moats	USAF	Cdr, 6th Tac AF (NATO)	21–23 Oct 73
GEN Zais	USA	Cdr, NATO Ground Forces South Eastern Europe.	21–23 Oct 73
GEN Davison	USA	USCINCUSAEUR	4–7 Nov 73
MG Klingenhagen	USA	DCS Log, USAREUR	4–7 Nov 73
MG Hughes	USA	CG, MEDCOMEUR	4–7 Nov 73
BG Fix	USA	Dir, Int Log (AMC)	15–19 Nov 73
BG Werbeck	USAF	Cdr, AFCS	17–20 Nov 73
MG Hayes	USAF	Dep Dir, J–4, USEUCOM	29 Nov–2 Dec 73
LTG Hollis	USA	CENTO	30 Nov–6 Dec 73
GEN Eade	USAF	Dep CINC European Command	1–5 Dec 73
MG Patton	USA	J–7, EUCOM	1–5 Dec 73
RADM Feightner	USN	Dep, Naval Air Systems Command	16–19 Dec 73
VADM Turner	USN	President, Naval War College	16–22 Dec 73
GEN Carlton	USAF	Cdr, MAC	20–22 Jan 74
MG Glauch	USAF	DCS/Ops, MAC	20–22 Jan 74
BG Newby	USAF	DCS/Log, MAC	20–22 Jan 74
BG Gilbert	USA	Cdr, ECA	21–23 Jan 74
ADM Bagley	USN	CINCNAVEUR	5–7 Feb 74
BG Swenson	USA	DCS, CE USAREUR	11–15 Feb 74

Visitor	Service	Title	Dates
MR Jacobs	DOD	GS-18 (re ESD/FMS)	10-16 Feb 74
BG Hill	USA	Ch., USMTM (Saudi Arabia)	15-16 Feb 74
BG Werbeck	USAF	Cdr, AFCS	16-20 Feb 74
GEN Carlton	USAF	Cdr, MAC	4-7 Mar 74
MR Tremblay	State	FSO-2	4-7 Mar 74
MR Shea	DOD	GS-17	4-7 Mar 74
MG Heinrichs	USA	CG, AVSCOM	7-16 Mar 74
RADM Feightner	USN	Dep, Naval Air Systems Command	7-16 Mar 74
ADM Moorer	USN	CJCS	7-12 Apr 74
MR Noyes	DOD	Dep Ass't SecDef	7-12 Apr 74
GEN Anderson	USMC	Ass't Cmdt, USMC	25-27 Apr 74
GEN Brown	USAF	CSAF	29 Apr-2 May 74
VADM Bayne	USN	Cmdt, NWC	6-8 May 74
RADM Feightner	USN	Dep, Naval Air Systems Command	4-7 May 74
RADM Lake	USN	Dep, Nav Elec Systems Command	9-15 May 74
MG Kearney	USAF	MAC	14-16 May 74
BG Dunlap	USA	Ch, Nurses Corps, USA	18-21 May 74
BG Kelly	USAF	USAF Logistics	19-21 May 74
MG Maddox	USA	CG, USAA Center & Aviation Sch	19-29 May 74
BG Rippitoe	USAF	Cmdr, TAC Control Wing	1-6 Jun 74
RADM Nance	USN	EUCOM Cmd Insp Team	8-12 Jun 74
RADM Alvis	USN	F-14 Project Manager	6-11 Jun 74
Mr Aine	DOD	DOD/ISA (GS-17)	6-11 Jun 74
VADM Cagle	USN	Cdr, Nav Ed & Trng	5-18 Jul 74
MR Gibson	USA	DCS Log USAREUR	15-17 Jul 74
RADM Gerhard	USN	Dir, Ops 63	22-28 Aug 74
RADM Alvis	USN	F-14 Project Manager	3-7 Aug 74
MR Middendorf	DOD	Secretary of the Navy	10-12 Sep 74
RADM Gerhard	USN	Dir, OPS 63	10-12 Sep 74
MR Constanty	State	Dep IG, State Dept	11-12 Sep 74
MR McLucas	DOD	Secretary of the AF	4-7 Oct 74
RADM Alvis	USN	F-14 Project Manager	16-23 Oct 74
HON M Hoffman	DOD	Asst SecDef	19-24 Oct 74
MG Slay	USAF	PEACE CROWN Program	19-24 Oct 74
MG Creech	USAF	PEACE CROWN Program	19-24 Oct 74
ADM Holloway	USN	Ch, Nav Ops	3-8 Nov 74
RADM Gerhard	USN	Ch, Nav Ops	3-8 Nov 74
BG Swenson	USA ACCOM	DSC, Comm Elec, USAREUR	4-8 Nov 74
BG Hill	USA	Ch, Mil Training Mission Saudi Arabia	16-20 Nov 74
MG Hinrichs	USA	AVSCOM	18-23 Nov 74
GEN Eade	USAF	Deputy CINCEUR	27-28 Nov 74
MG Hall	USA	Dir, J-3, EUCOM	27-28 Nov 74
ADM Nance	USN	Dep Chief of Staff, EUCOM	27-28 Nov 74
MG Ryder	USA	Dir, J-4/7, EUCOM	27-28 Nov 74
MG Yancey	USA	Dir, J-5, EUCOM	27-28 Nov 74
MR Mulier	State	FSO-1, POLAD, EUCOM	27-28 Nov 74
GEN Haig	USA	CINCEUR	3-6 Dec 74

Visitor	Service	Dates
RADM Hanks	USN	7-10 Jan 75
RADM Marshall	USN	27 Jan 75
BG Persons	USA	31 Jan-5 Feb 75
MG Albright	USA	1-5 Feb 75
ADM Shear	USN	17-19 Feb 75
BG Post	USAF	21-23 Feb 75
MG Nash	USAF	5-6 Mar 75
LTGEN Fish	USAF	9-17 Mar 75
MG Slay	USAF	9-17 Mar 75
MG Rebh	USAF	4-5 Apr 75
BG Post	USAF	12-24 Apr 75
MG Hinrichs	USA	19 Apr-1 May 75
GEN Jones	USAF	26-30 Apr 75
ADM Shear	USN	2-3 May 75
LTG Kornet	USA	7-12 May 75
RADM Bigley	USN	16-18 May 75
ADM Cramer	USN	17-24 May 75
MG Gibson	USA	30 May-4 Jun 75
MG Hoefling	USA	9-12 Jun 75
RADM Alvis	USN	10-15 Jun 75
MG Sumner	USAF	20-24 Jun 75
BG McInerney	USAF	11-14 Jul 75
GEN Weyland	USA	26-30 Jul 75
BG Gast	USAF	8-12 Aug 75
MG Green	USA	25 Sep 75
VADM Custis	USN	26-29 Sep 75
MG Gorman	USA	5-12 Oct 75
MG Kingston	USA	7-11 Oct 75
VADM Lee	USN	10-17 Oct 75
RADM Alvis	USN	10-17 Oct 75
BG Gast	USAF	27-30 Oct 75

Visitor	Service	Dates
BG Racke	USA	2–5 Nov 75
GEN Blanchard	USA	8–10 Nov 75
VADM Wilson	USN	8–13 Nov 75
MG Johansen	USA	13–23 Nov 75
GEN Huyser	USAF	1–3 Dec 75
MG Ryder	USA	1–3 Dec 75
BG DeFiori	USA	18–23 Jan 76
RADM Alvis	USN	25–31 Jan 76
GEN Deane	USA	8–18 Feb 76
MG Fix	USA	8–18 Feb 76
RADM Dowd	USN	26 Feb–3 Mar 76
MG Harris	USA	5–19 Mar 76

LIST B.—SENIOR STATE DEPARTMENT VISITORS

Visitor	Title	Dates
Peter Constable	Director, Office of Pakistan, Afghanistan, Bangladesh	February 1974.
Philip Stoddard	Bureau of Intelligence and Research	March 1974.
Sidney Sober	Deputy Assistant Secretary	September 1974.
Henry Kissinger		November 1974.
Charles Naas	Country Director, Iran	February 1975.
Charles Robinson	Undersecretary for Economic Affairs	February 1975.
Charles Robinson	Undersecretary for Economic Affairs	June 1975.
Sidney Sober	Deputy Assistant Secretary	September 1975.
Charles Robinson	Undersecretary for Economic Affairs	October 1975.
Carlyle Maw	Undersecretary for Security Assistance	February 1976.
Myron Kratzer	Acting Assistant Secretary for O.E.S	February 1976.

B. Security Assistance Dollar Value

[In thousands]

A. Total grant aid and government-to-government sales (FMS)	$11, 200, 000
B. FMS orders by U.S. service:	
1. Fiscal year 1950 through Fiscal year 1975:	
Army	2, 800, 000
Navy	4, 200, 000
USAF	3, 300, 000
2. Fiscal year 1973, $2.1 Billion:	
Army	890, 651
Navy	468, 299
USAF	755, 554
3. Fiscal year 1974, $3.9 Billion:	
Army	629, 437
Navy	2, 433, 985
USAF	853, 699
4. Fiscal year 1975, $2.5 Billion:	
Army	800, 784
Navy	1, 166, 999
USAF	550, 509
5. Fiscal year 1976, $1.3 Billion (est)	?

C. GOVERNMENT-TO-GOVERNMENT MILITARY SALES BY FISCAL YEAR

Fiscal year	Ordered	Delivered	To be delivered
1950–64	$1, 285	$1, 211	
1965	68, 857	12, 896	
1966	207, 809	52, 188	
1967	144, 373	38, 866	
1968	79, 369	56, 717	
1969	239, 392	94, 894	
1970	113, 197	127, 717	
1971	397, 956	79, 352	
1972	523, 957	197, 169	
1973	2, 114, 503	234, 309	
1974	3, 917, 121	509, 738	
1975	2, 567, 903	944, 650	
1976 (est)	1, 256, 619	?	
Total	[1] 11, 622, 619	2, 358, 000	$7, 906, 000

[1] The $11,622,619 figure includes $.101 billion undefinitized details.

D. FMS PROGRAM BY CATEGORY

[In thousands of dollars]

	Ordered	Delivered	To be delivered
Aircraft	5, 021, 845	1, 217, 567	3, 844, 278
Ships	1, 446, 815	22, 670	1 424, 146
Vehicles/Wpns	410, 933	219, 429	191, 504
Ammunition	619, 409	198, 372	421, 037
Missiles	906, 115	169, 510	736, 605
Comm Eqpt	298, 650	113, 672	184, 978
Other Eqpt	199, 340	78, 739	120, 600
Construction	17, 598	308	17, 289
Rep/Rehab/Ovhl	78, 742	5, 747	72, 995
Supp Opns	326, 739	77, 763	248, 976
Training	237, 231	130, 870	106, 361
Other Svcs	702, 433	123, 513	578, 920
Total (through fiscal year 1975)	10, 265, 850	2, 358, 161	[1] 7, 906, 689

[1] Through 1980's.

C. List of Contractors and Personnel

Company	Major field of activity	Number of personnel
AAI Corp	Aircraft Electronics	3
Augusta Bell	Aircraft Maintenance	10
Avco Corp/Lycoming	Aircraft Engine Maintenance	13
Bel Helicopter Int	Flight Training	1,424
Booz Allen & Hamilton	Program Management	7
Bowen-McLaughlin-York	Tank Rebuilding	35
Brown & Root E&C	Shipyard Construction	16
Cessna Aircraft Co	Aircraft	1
Collins Radio	Communications Electronics	4
Computer Sciences Corp	Computers Software	264
Emerson Electric	Armament Maintenance	1
Epsco Inc	Electronics	1
General Dynamics	Missiles	11
General Electric	Engines and Armament	15
General Motors/Allison	Aircraft Engine Maintenance	3
Grumman Aerospace Corp	Aircraft Maintenance	19
Hazeltine Corp	Electronics	1
Hughes Aircraft	Aircraft Electronics & Munitions	7
ITT	Communications Electronics	4
International Technical Product	Communications	85
Itek Corp	Electronics	3
Kaman Aerospace Corp	Aircraft Maintenance	3
Litton	Electronics	7
Lockheed	Aircraft Maintenance	123
Logistics Support Corp	Aircraft Maintenance	160
Martin-Marietta	Electronics	4
McDonnell Douglas	Aircraft Maintenance	41
Northrup	Missiles/Aircraft Maintenance	29
Page Communications	Communications	5
Philco-Ford	Electronics	35
Pratt-Whitney	Aircraft Engine Maintenance	4
Raytheon	Missiles	126
RCA Corp	Electronics	7
SDC	Air Defense Systems Training	4
Singer Co	Electronics	1
Stanwick	Shipyard Construction	107
Sylvania Corp	Electronics	3
Texas Instruments	Armament	2
Westinghouse	Electronics	140
Total		2,728

Note.—As of October 1, 1975.

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